

# Motor de Pistões Radiais V JMDG

## Baixa rotação e alto torque



### Introdução

São motores de baixa rotação e altíssimo torque e que podem ser aplicados em várias áreas que exigem estas características. Podem ser aplicados nas áreas de petróleo, química, perfuratriz, construção, guinchos hidráulicos, transmissões e especialmente na injeção de plásticos e moldes, etc.

### Características

- Baixo nível sonoro
- Alto torque de partida (alta eficiência mecânica – acima de 90%), boa estabilidade a baixíssima rotação.
- Alto rendimento volumétrico.
- Alto rendimento mecânico.
- Duplo sentido de rotação.
- Suporta grandes esforços radiais e axiais.
- Alta relação entre peso/potência.
- Transforma a energia hidráulica em energia mecânica (movimento).

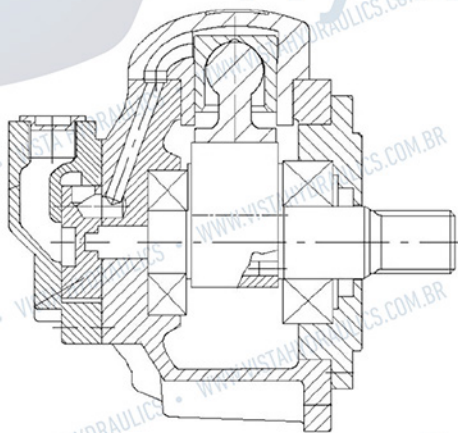
### Princípio de funcionamento

O óleo entra no cilindro sobre o pistão em alta pressão, empurrando-o para baixo.

O pistão está montado no virabrequim e o faz girar, juntamente com o fluido. Quando o pistão caminha para a sua posição mais baixa, o cilindro é preenchido totalmente e ao subir envia-o pelo outro pórtico ao tanque ou válvula.

Dependendo do motor possui 5 ou 7 cilindros e todos trabalham um a um fazendo com que o virabrequim funcione continuamente enquanto há fluxo de fluido.

Se mudar o pórtico de entrada do fluido, o motor funcionará da mesma forma e no sentido oposto, ou seja, é bi-direcional.



## Solicite pelo código

V J M D G                       

1            2            3            4            5            6

### 1. Motor de pistões radiais – Família

### 2. Série do Motor

### 3. Cilindrada – tamanho teórico

### 4. Eixo

A - Eixo estriado – padrão

B - Eixo cilíndrico – padrão

I - Estriado interno (fêmea) – padrão

T - Mesmas dimensões dos motores Intermot – Italia

### 5. Distribuidor

1) Código do distribuidor padrão nas diferentes séries

2) Código do distribuidor especial

### 6. Sentido de rotação – visto pelo eixo do motor

R - Direita

L - Esquerda

### Nota!

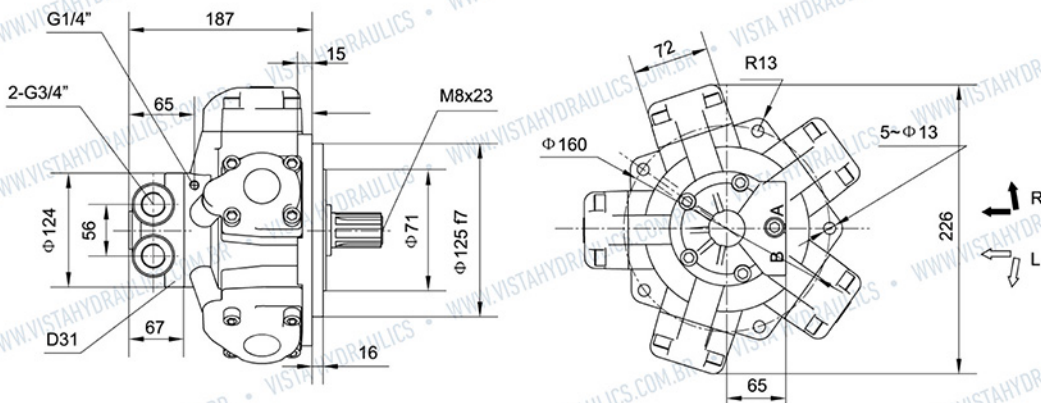
Necessário o código completo quando na colocação do pedido.



## Dados Técnicos

Tipo	Deslocamento (cm <sup>3</sup> /rev)	Pressão (Bar)		Torque (N.m)		Faixa de rotação (r/min)	Potência Máxima (Kw)	Peso (Kg)
		Pressão de pico	Pressão contínua	Máximo	Teórico (N.m/Mpa)			
V JMDG1-50	56	32	25	207	8.2	15-1250	16	23
V JMDG1-63	64	32	25	237	9.5	15-1250	16	23
V JMDG1-80	78	32	25	300	12	15-1000	16	23
V JMDG1-100	96	32	25	355	14	15-1000	16	23
V JMDG1-125	126	25	20	380	19	15-1000	16	23
V JMDG1-160	159	25	20	472	23	15-1000	16	23
V JMDG2-100	113	32	25	420	18	10-1250	25	28
V JMDG2-150	157	32	25	581	25	10-1000	25	28
V JMDG2-175	176	25	20	532	27	10-1000	25	28
V JMDG2-200	201	25	20	600	32	8-800	25	28
V JMDG2-250	254	20	16	607	38	8-630	25	28
V JMDG2-280	271	20	16	642	40	8-630	25	28
V JMDG3-200	199	32	25	736	29	8-630	37	36
V JMDG3-250	254	32	25	949	40	8-630	40	36
V JMDG3-300	289	25	20	864	46	6-500	40	36
V JMDG3-350	351	25	20	1040	55	6-400	40	36
V JMDG3-400	397	20	16	949	63	6-400	40	36
V JMDG6-400	397	32	25	1483	63	5-630	60	65
V JMDG6-450	452	32	25	1638	72	5-630	63	65
V JMDG6-500	491	25	20	1463	78	5-500	62	65
V JMDG6-600	594	25	20	1775	94	4-500	65	65
V JMDG6-700	683	20	16	1633	103	4-400	65	65
V JMDG6-750	754	20	16	1785	112	4-320	65	65
V JMDG8-600	617	32	25	2282	91	4-500	70	71
V JMDG8-700	710	32	25	2626	105	4-400	70	71
V JMDG8-800	810	25	20	2396	120	4-400	65	71
V JMDG8-900	889	25	20	2629	131	3-350	65	71
V JMDG8-1000	1000	20	16	2366	148	3-300	65	71
V JMDG11-700	714	32	25	2667	114	4-400	80	90
V JMDG11-800	782	32	25	2959	120	4-400	80	90
V JMDG11-1000	995	25	20	2974	158	3-320	85	90
V JMDG11-1100	1116	25	20	3336	177	3-320	85	90
V JMDG11-1200	1175	25	20	3512	187	3-320	85	90
V JMDG11-1300	1296	20	16	3080	206	3-250	80	90
V JMDG16-1400	1375	32	25	5138	210	2-400	100	160
V JMDG16-1600	1648	32	25	6158	262	2-320	110	160
V JMDG16-1800	1814	25	20	5433	283	2-320	110	160
V JMDG16-2000	2034	25	20	6030	323	2-250	110	160
V JMDG16-2400	2412	20	16	5763	384	2-250	97	160
V JMDG31-2500	2550	32	25	9523	405	1-200	150	325
V JMDG31-2800	2826	32	25	10559	443	1-200	150	325
V JMDG31-3000	3050	25	20	9135	485	1-200	140	325
V JMDG31-3150	3142	25	20	9392	500	1-200	140	325
V JMDG31-3500	3419	25	20	10220	544	1-200	140	325
V JMDG31-4000	4170	25	20	12481	665	1-160	130	325
V JMDG31-5000	5190	20	16	12387	825	1-160	130	325
V JMDG71-4600	4617	25	20	13624	735	1-150	145	415
V JMDG71-5400	5459	25	20	16168	869	1-125	145	415
V JMDG71-6300	6361	20	16	16050	1000	1-120	145	415
V JMDG100-6300	6133	32	25	22916	975	0.5-125	168	700
V JMDG100-8000	7693	32	25	28744	1223	0.5-125	168	700
V JMDG100-10000	10688	25	20	31942	1699	0.3-100	200	700
V JMDG160-12500	13335	25	20	39433	1972	0.3-80	220	1000
V JMDG160-16000	16040	20	16	37948	2554	0.3-63	220	1000

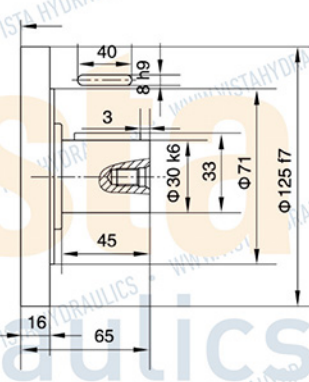
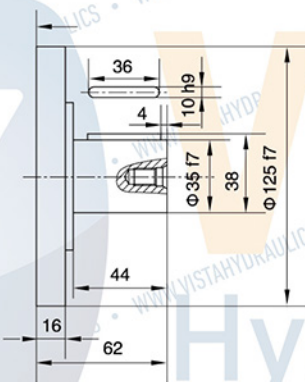
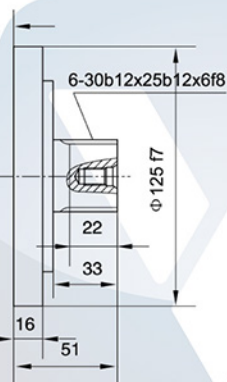
# Dimensões - V JMDG1



V JMDG1-\*\*A

V JMDG1-\*\*B

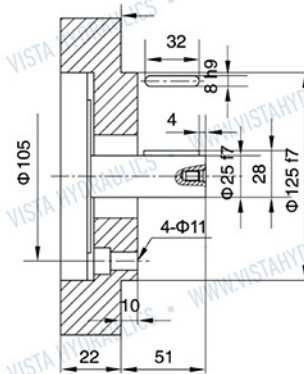
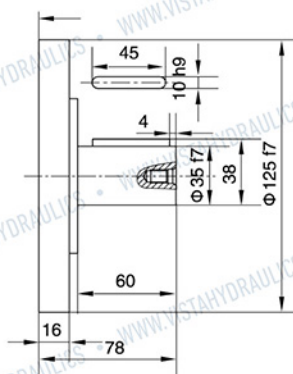
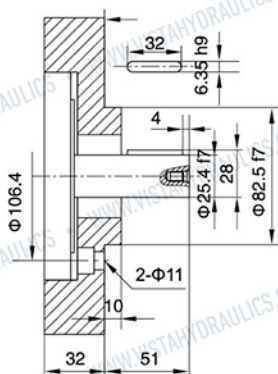
V JMDG1-\*\*S058



V JMDG1-\*\*B1

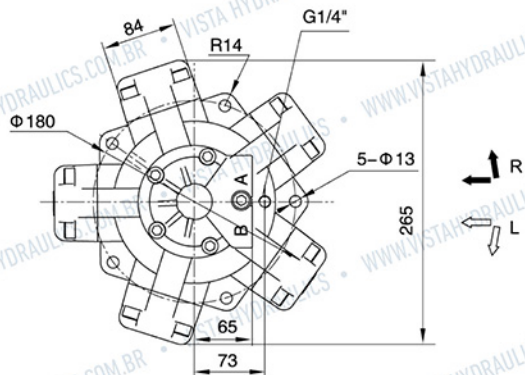
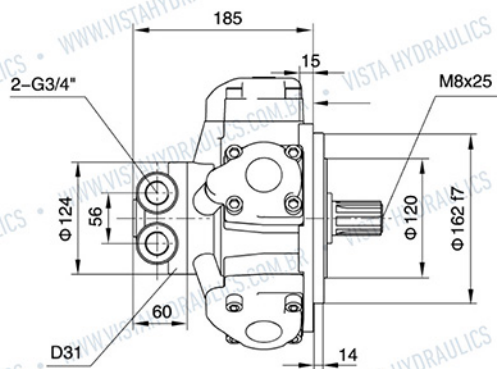
V JMDG1-\*\*B2

V JMDG1-\*\*B11





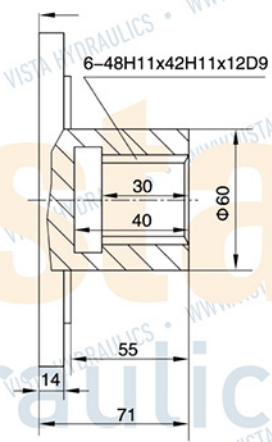
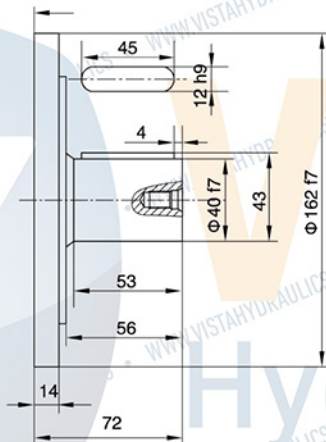
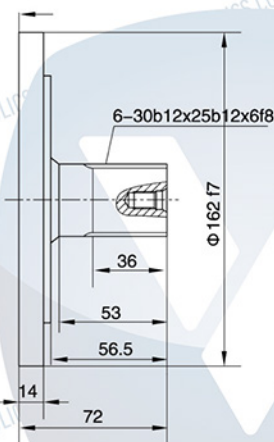
# Dimensões - V JMDG2



V JMDG2-\*\*\*A

V JMDG2-\*\*\*B

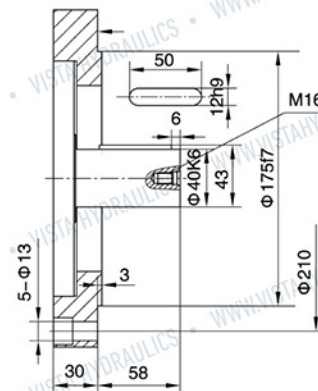
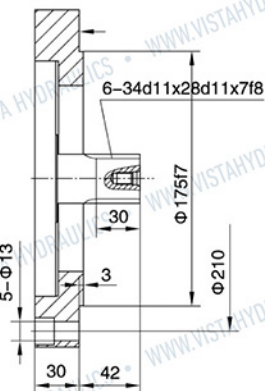
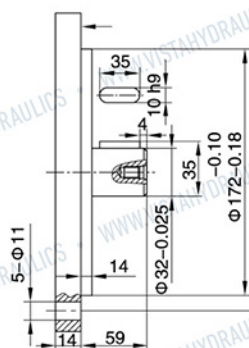
V JMDG2-\*\*\*I

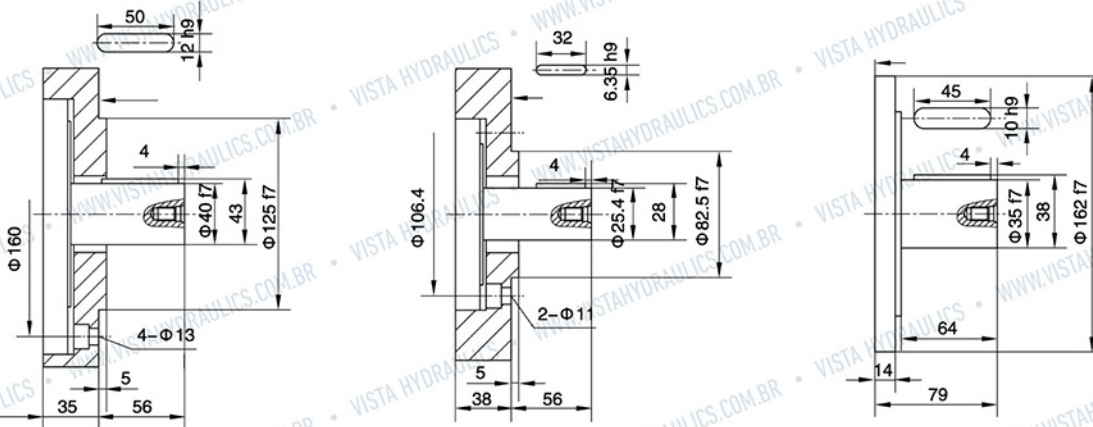


V JMDG2-\*\*\*T12

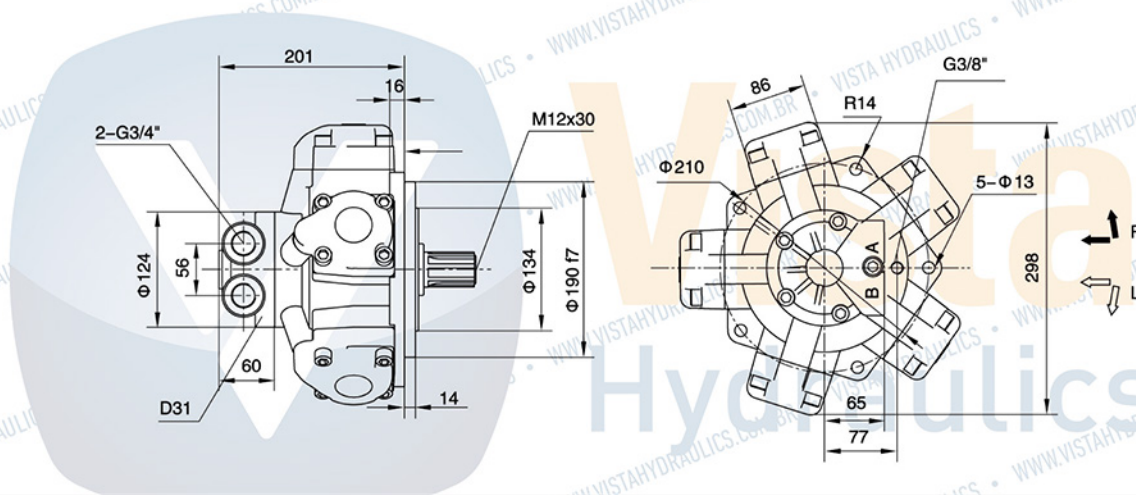
V JMDG2-\*\*\*S11

V JMDG2-\*\*\*S18





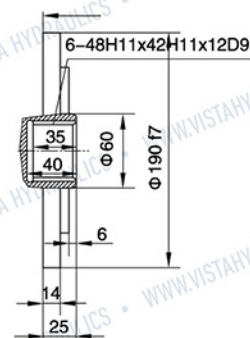
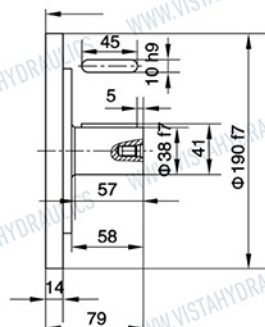
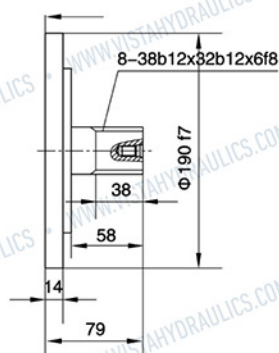
### Dimensões - V JMDG3



V JMDG3-\*\*A

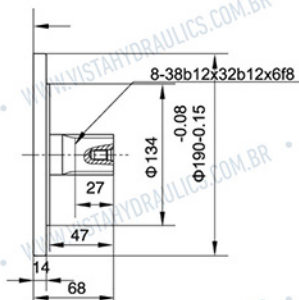
V JMDG3-\*\*B

V JMDG3-\*\*I

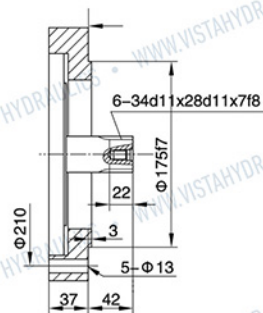




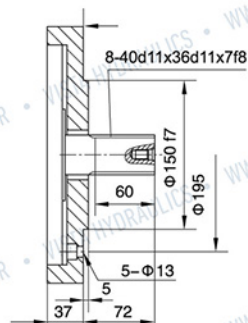
V JMDG3-\*\*T20



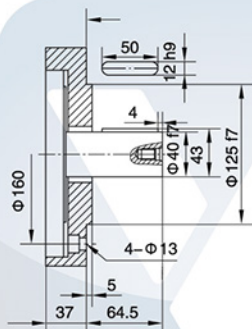
V JMDG3-\*\*S11



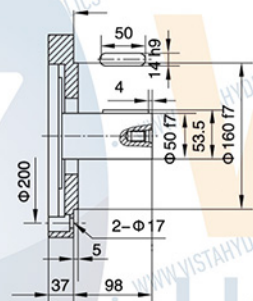
V JMDG3-\*\*SL2



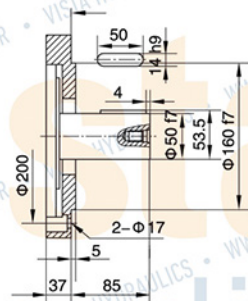
V JMDG3-\*\*B1



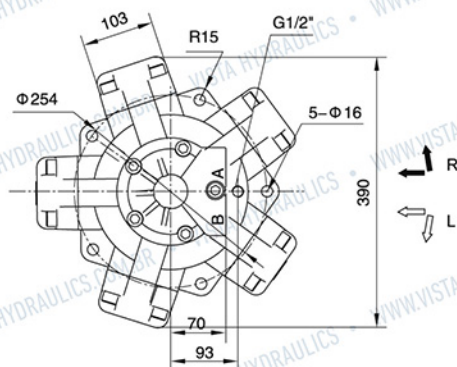
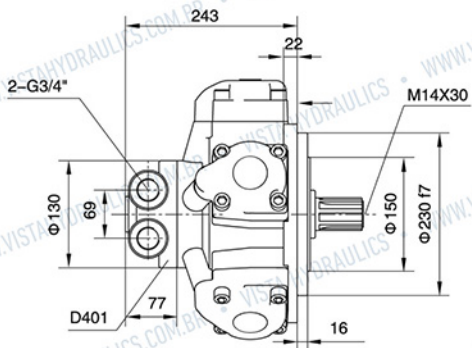
V JMDG3-\*\*B2



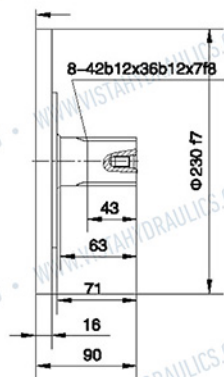
V JMDG3-\*\*B4



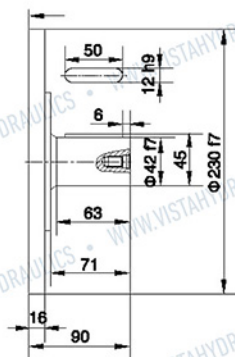
### Dimensões - V JMDG6



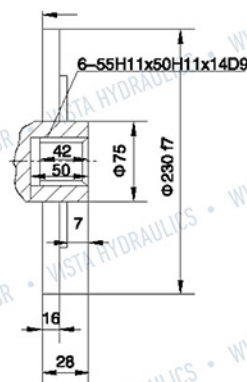
V JMDG6-\*\*A



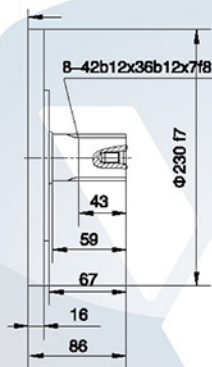
V JMDG6-\*\*B



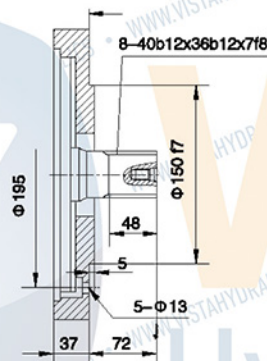
V JMDG6-\*\*I



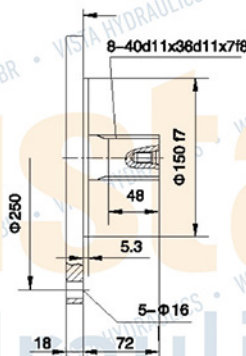
V JMDG6-\*\*T20



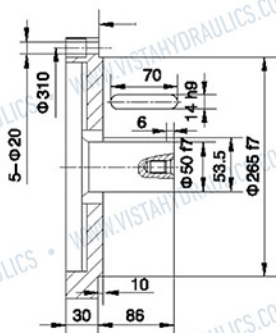
V JMDG6-\*\*SL2



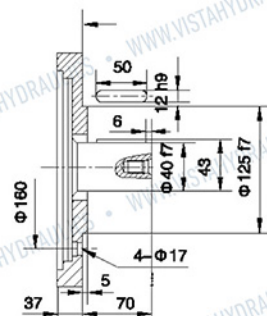
V JMDG6-\*\*S21



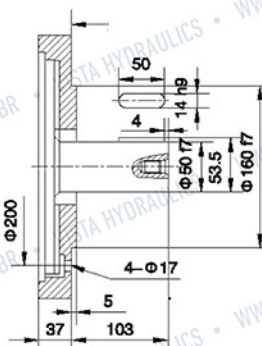
V JMDG6-\*\*S38



V JMDG6-\*\*B1

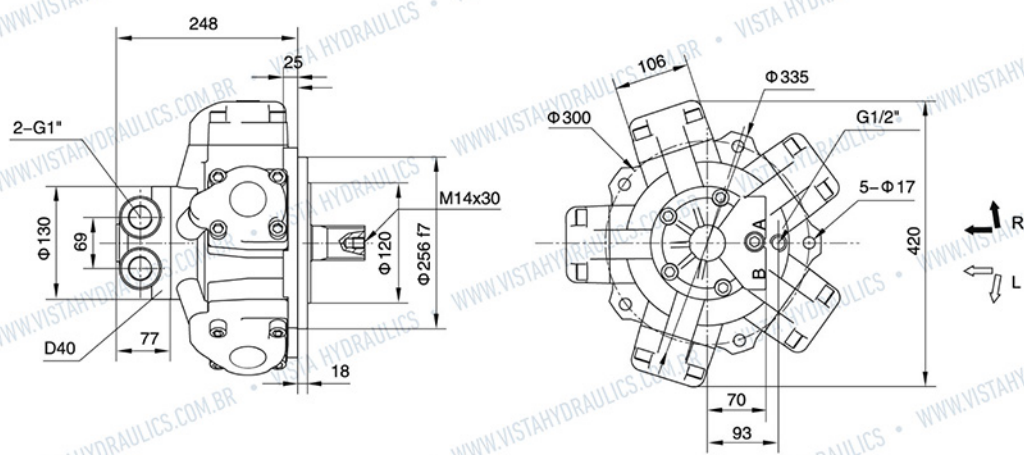


V JMDG6-\*\*B2



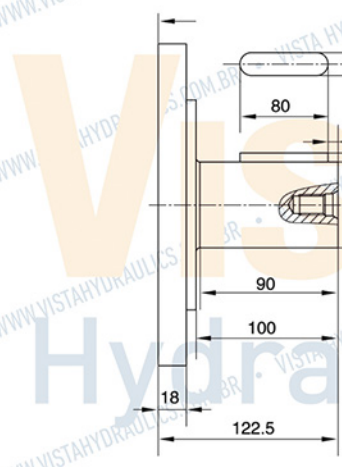
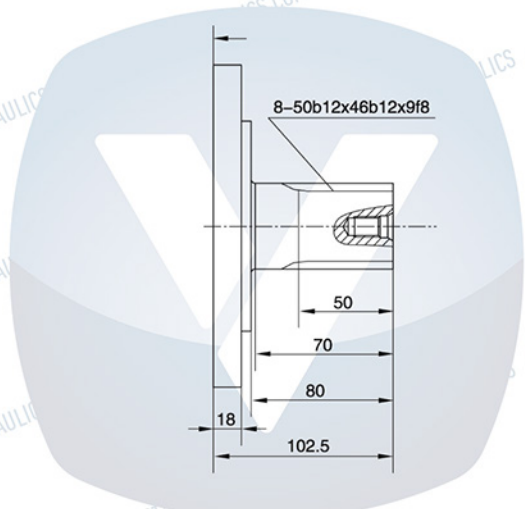


### Dimensões - V JMDG8

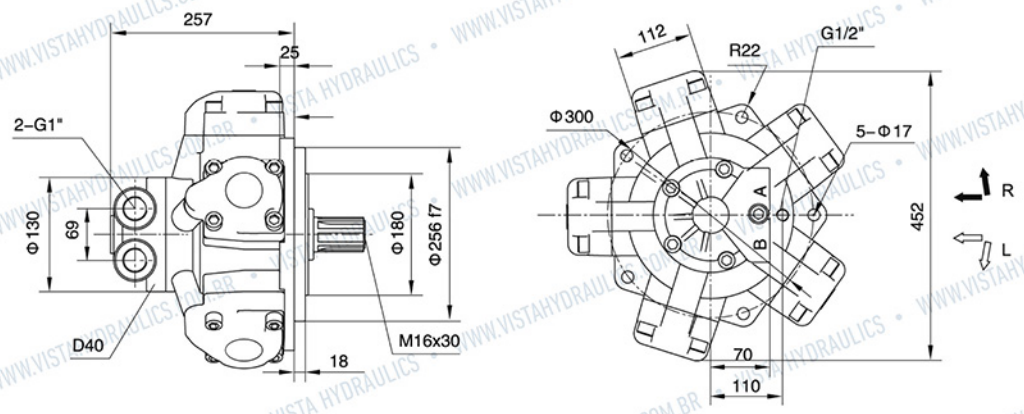


JMDG8-\*\*A

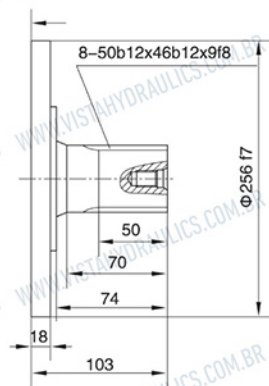
JMDG8-\*\*B



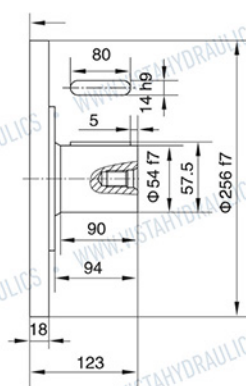
### Dimensões - V JMDG11



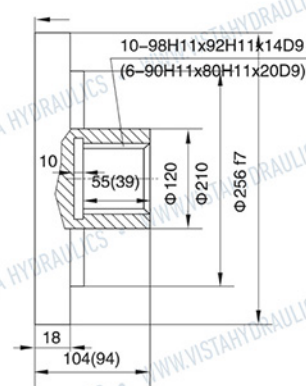
V JMDG11-\*\*A



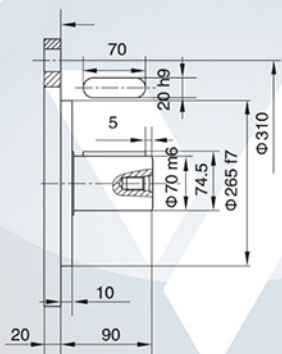
V JMDG11-\*\*B



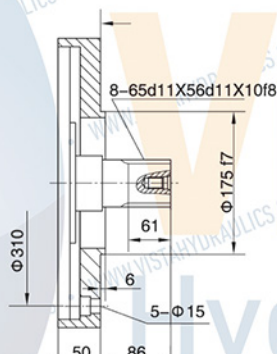
V JMDG11-\*\*I32(I21)



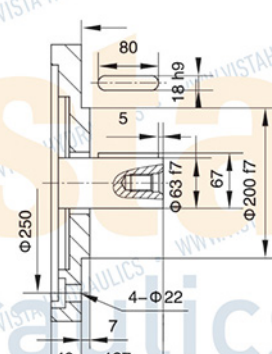
V JMDG11-\*\*S48



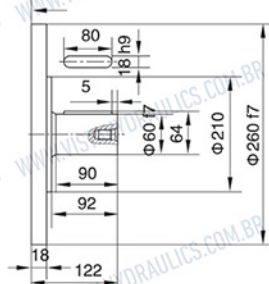
V JMDG11-\*\*SL4



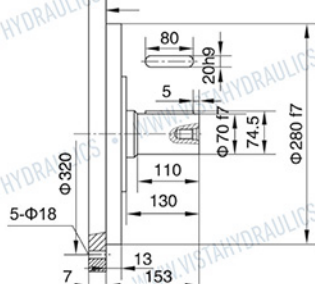
V JMDG11-\*\*B2



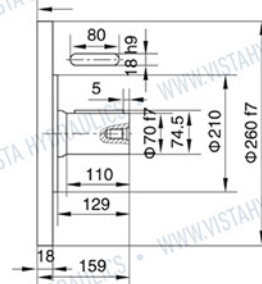
V JMDG11-\*\*B3



V JMDG11-\*\*B4



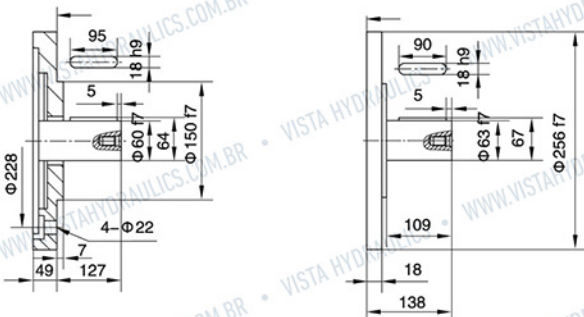
V JMDG11-\*\*B43



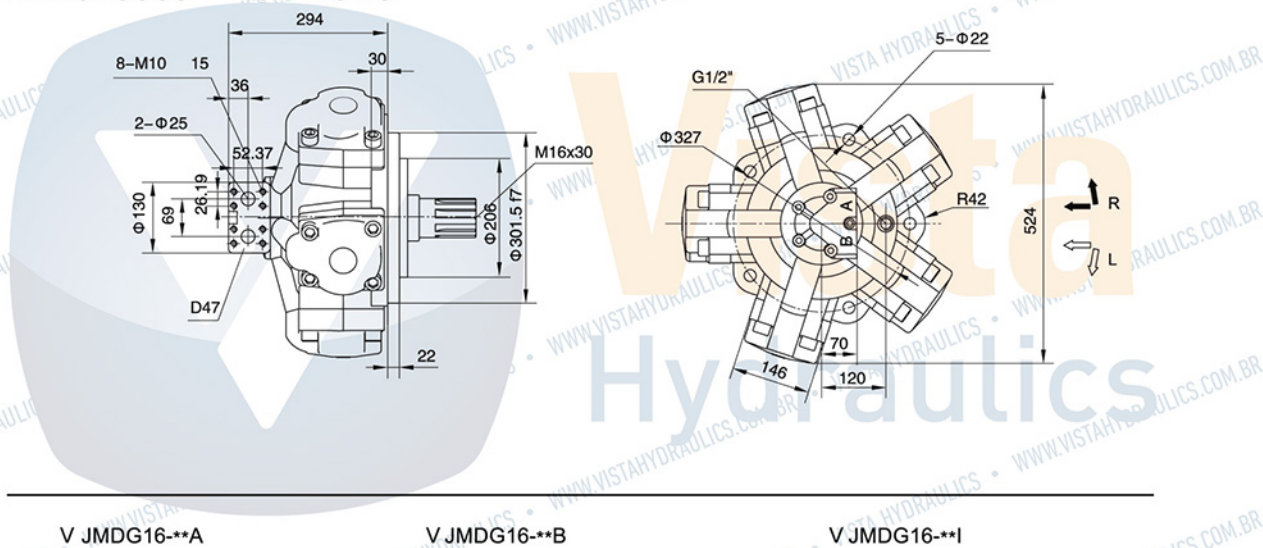


V JMDG11-\*\*B5

V JMDG11-\*\*D



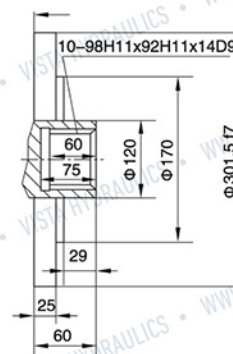
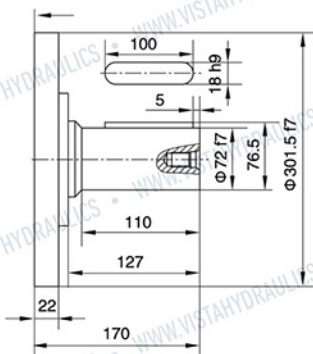
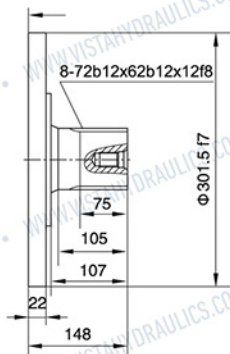
**Dimensões - V JMDG16**



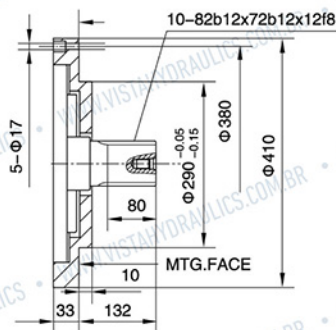
V JMDG16-\*\*A

V JMDG16-\*\*B

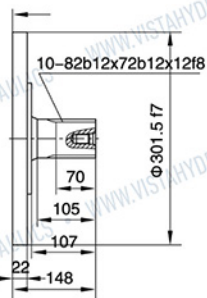
V JMDG16-\*\*I



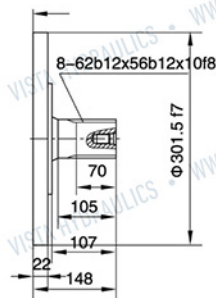
VJMDG16-\*\*TC50



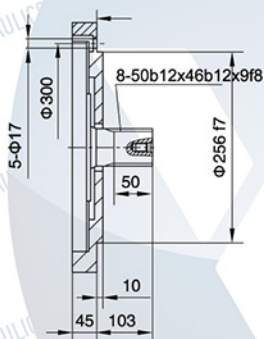
VJMDG16-\*\*A1



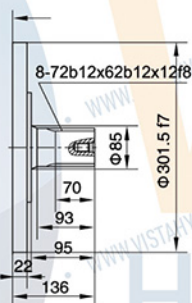
VJMDG16-\*\*A2



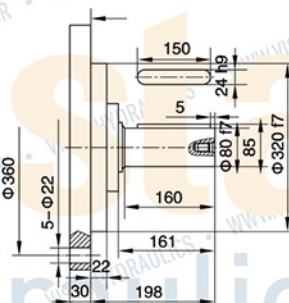
VJMDG16-\*\*A3



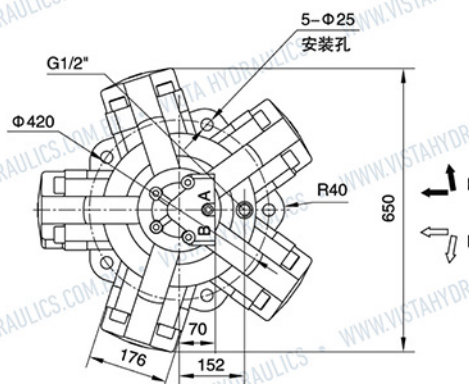
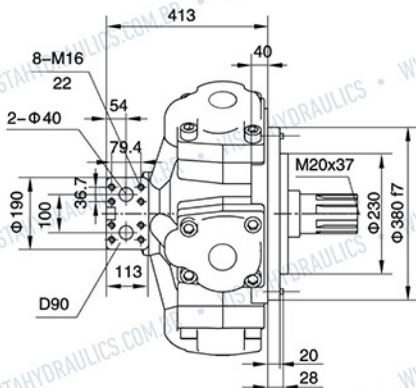
VJMDG16-\*\*A4



VJMDG16-\*\*B2

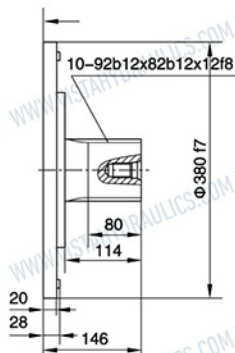


**Dimensões - V JMDG31**

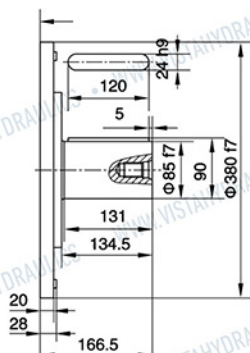




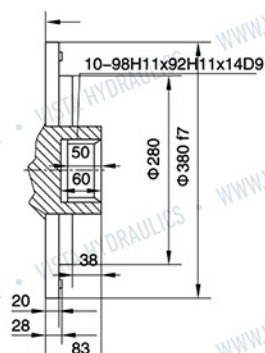
V JMDG31-\*\*A



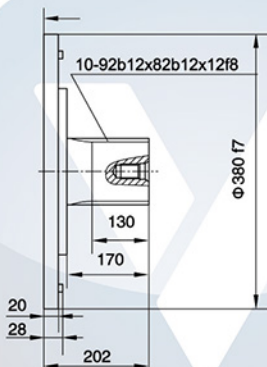
V JMDG31-\*\*B



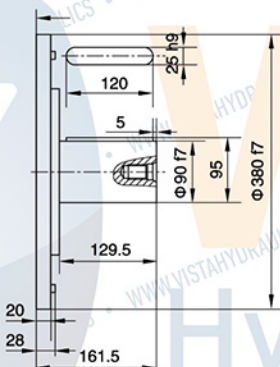
V JMDG31-\*\*I



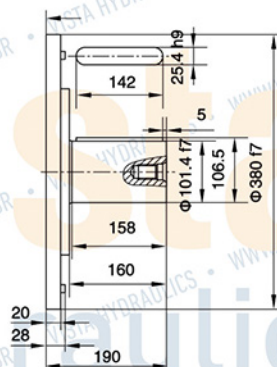
V JMDG31-\*\*A1



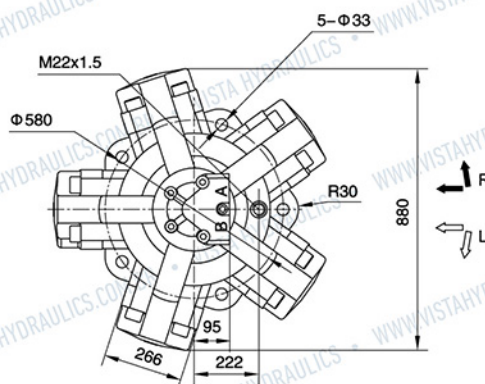
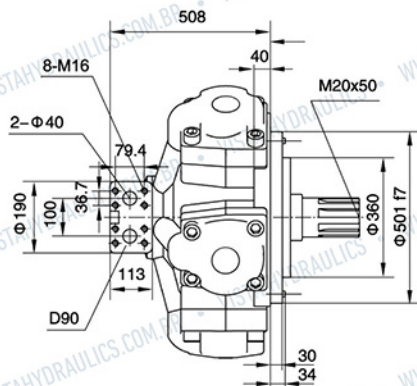
V JMDG31-\*\*B2



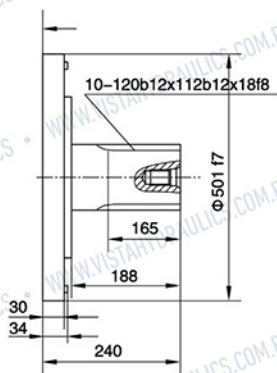
V JMDG31-\*\*B3



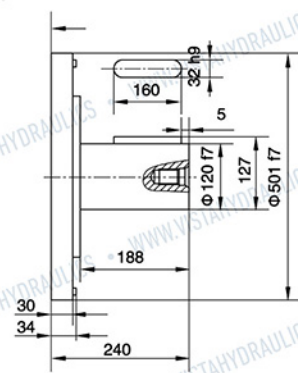
**Dimensões - V JMDG100**



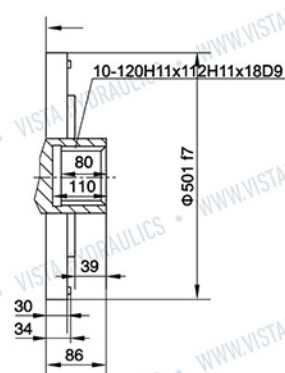
V JMDG100-\*\*A



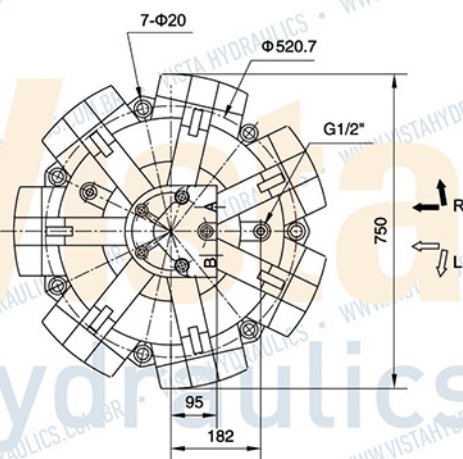
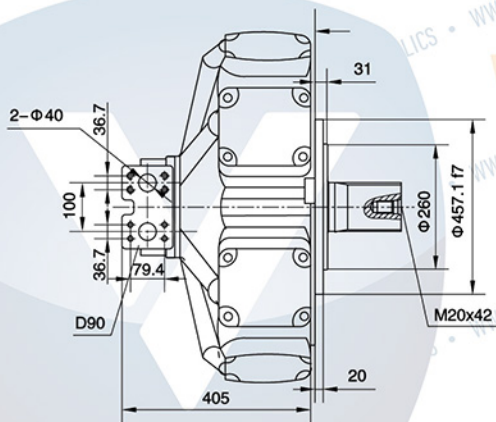
V JMDG100-\*\*B



V JMDG100-\*\*I

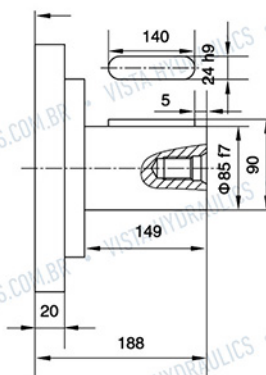
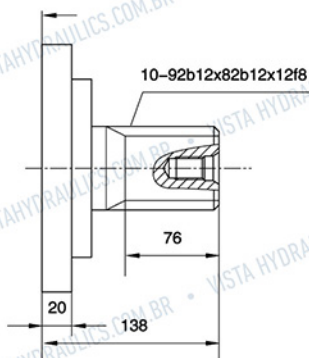


**Dimensões - V JMDG71**



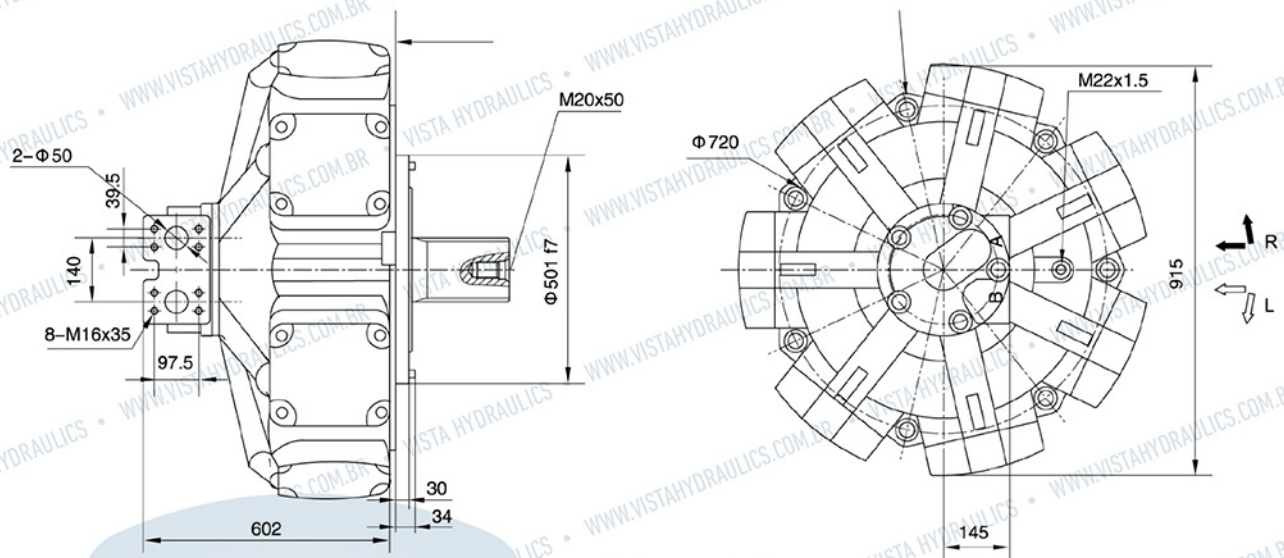
V JMDG71-\*\*A

V JMDG71-\*\*B





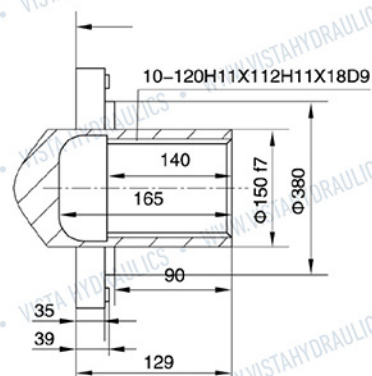
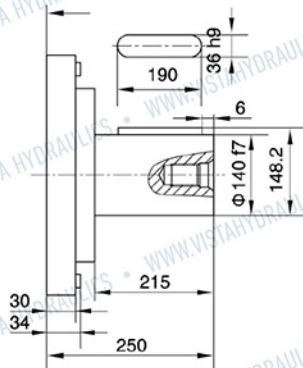
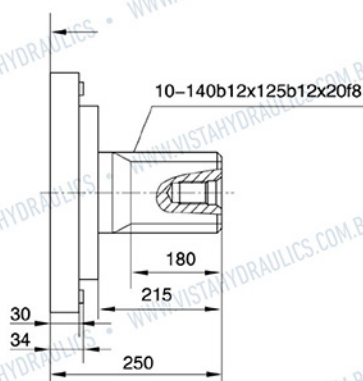
## Dimensões - V JMDG160



V JMDG160-\*\*A

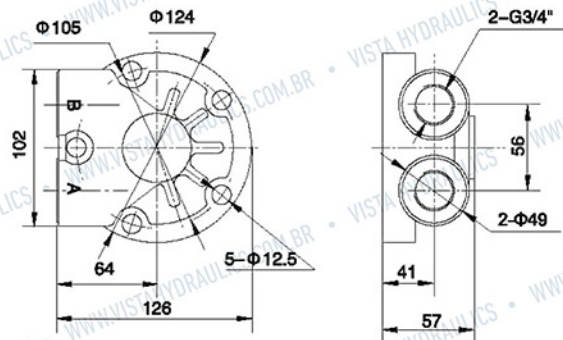
V JMDG160-\*\*B

V JMDG160-\*\*I



## Dimensões

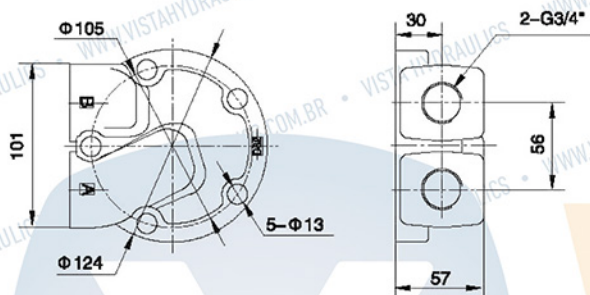
Pórticos A e B do motor.



### D31

D31 – Roscas de 3/4" nos Pórticos para as séries JMDG1, JMDG2 e JMDG3

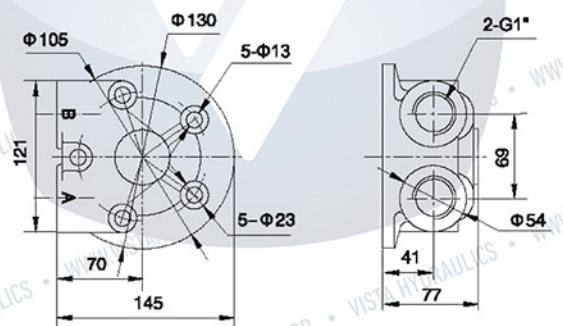
D310 – Rosca de 1" nos Pórticos para as séries JMDG1, JMDG2 e JMDG3



### D32

D32 – Roscas de 3/4" nos Pórticos para as séries JMDG2 e JMDG3

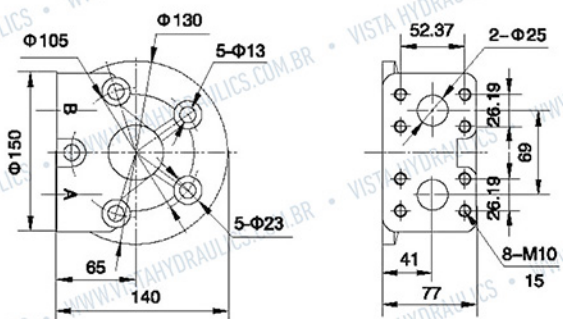
D320 – Roscas de 1" nos Pórticos para as séries JMDG2 e JMDG3



### D40

D40 – Roscas de 1" nos Pórticos para as séries JMDG6, JMDG11 e JMDG16

D401 – Roscas de 3/4" nos Pórticos para as séries JMDG6, JMDG11 e JMDG16



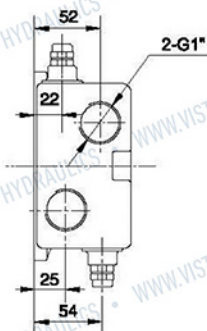
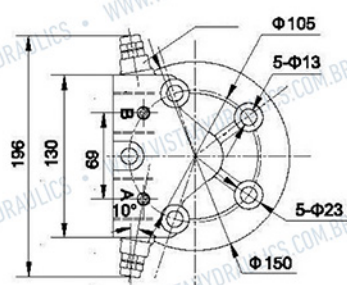
### D47

D47 – Flange com  $\Phi$  25mm para as séries JMDG6, JMDG11 e JMDG16



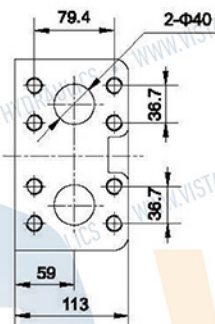
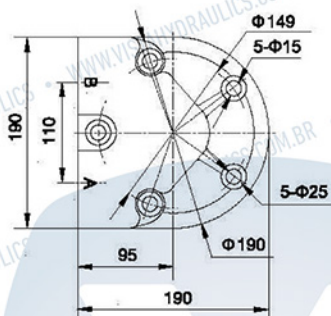
## Dimensões

Pórticos A e B do motor.



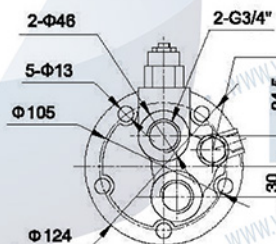
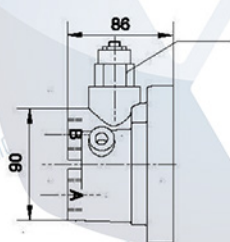
### D48

Roscas de 1" nos pórticos e válvula dupla de segurança para as séries JMDG6, JMDG11 e JMDG16



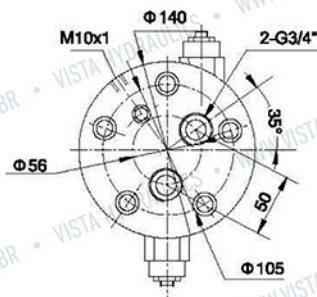
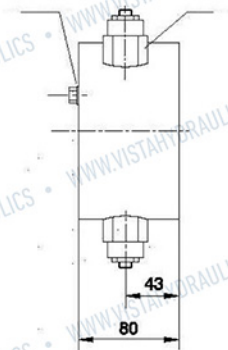
### D90

D90 – Flange com  $\Phi$  40mm para as séries JMDG71, JMDG11, JMDG16, JMDG31 e JMDG100



### D501

D501 – Roscas de  $\frac{3}{4}$ " nos Pórticos com válvulas alternativa (e/ou) e uma (01) contrabalanço para as séries JMDG1, JMDG2 e JMDG3

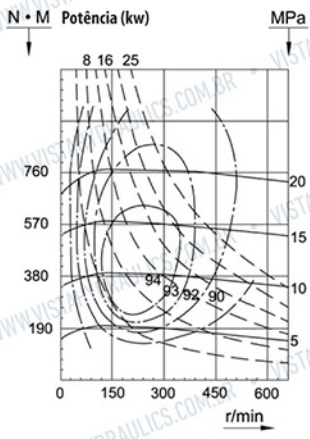


### D502

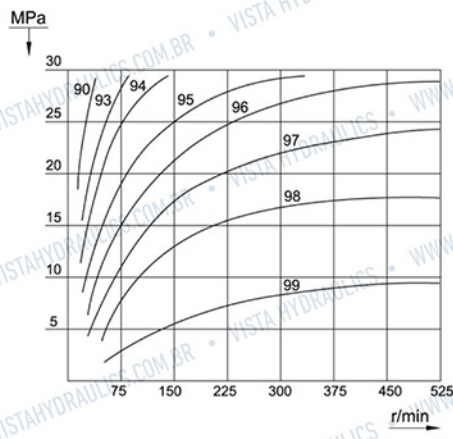
D502 – Roscas de  $\frac{3}{4}$ " nos Pórticos com válvulas alternativa (e/ou) e duas (02) contrabalanço para as séries JMDG1, JMDG2 e JMDG3

# Dimensões

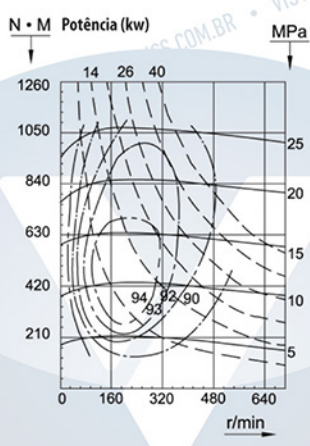
## Diagramas de Performances



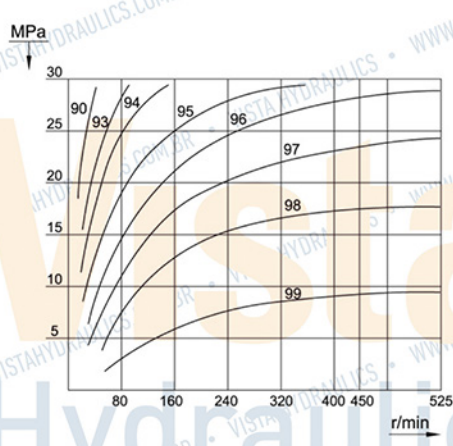
CARACTERÍSTICAS DE SAÍDA



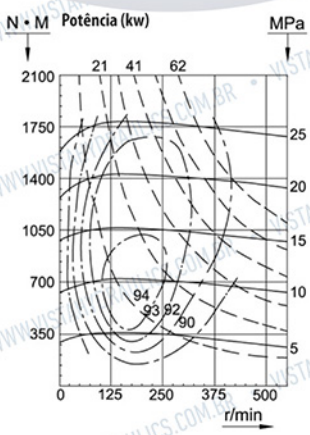
RENDIMENTO VOLUMÉTRICO (%)  
**V JMDG2-250**



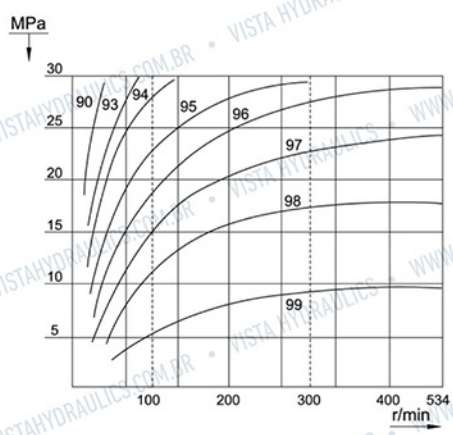
CARACTERÍSTICAS DE SAÍDA



RENDIMENTO VOLUMÉTRICO (%)  
**V JMDG3-300**



CARACTERÍSTICAS DE SAÍDA

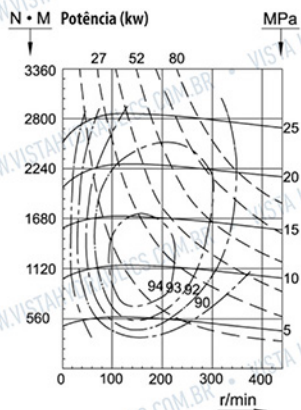


RENDIMENTO VOLUMÉTRICO (%)  
**V JMDG6-500**

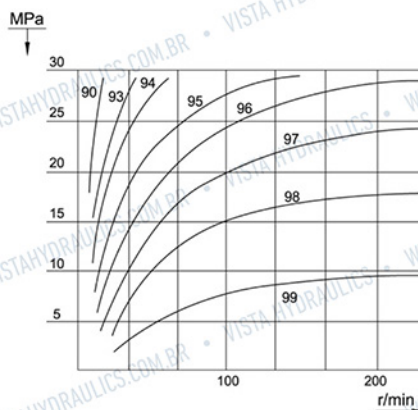


# Dimensões

## Diagramas de Performances

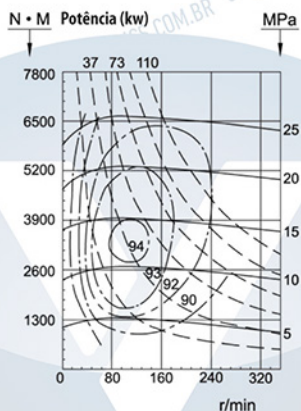


CARACTERÍSTICAS DE SAÍDA

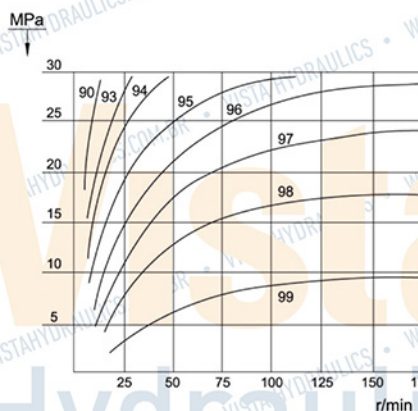


RENDIMENTO VOLUMÉTRICO (%)

V JMDG11-800

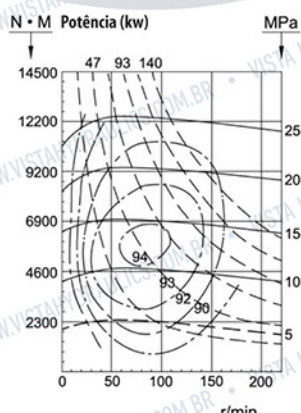


CARACTERÍSTICAS DE SAÍDA

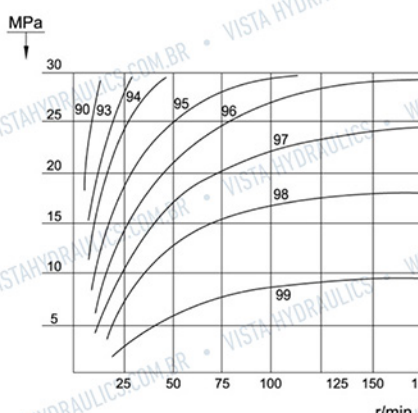


RENDIMENTO VOLUMÉTRICO (%)

V JMDG16-1800



CARACTERÍSTICAS DE SAÍDA



RENDIMENTO VOLUMÉTRICO (%)

V JMDG31-3150

## Instruções de montagens

### Requisitos básicos:

1. De acordo com a temperatura do ambiente e de trabalho, o óleo que você escolher deverá ter um elevado desempenho de viscosidade, com as seguintes propriedades de anti-oxidação, anti-ferrugem e alto ponto de fulgor, etc. Durante o funcionamento do motor em períodos pré-determinados, deve-se medir a sua viscosidade que deve ficar entre  $(25-70) \times 10^{-6} \text{m}^2/\text{s}$ . Água e ácidos, alcalinidade e impurezas mecânicas não devem exceder este valor.

2. Filtragem do óleo não pode exceder a 25  $\mu\text{m}$  nas condições normais de operação.

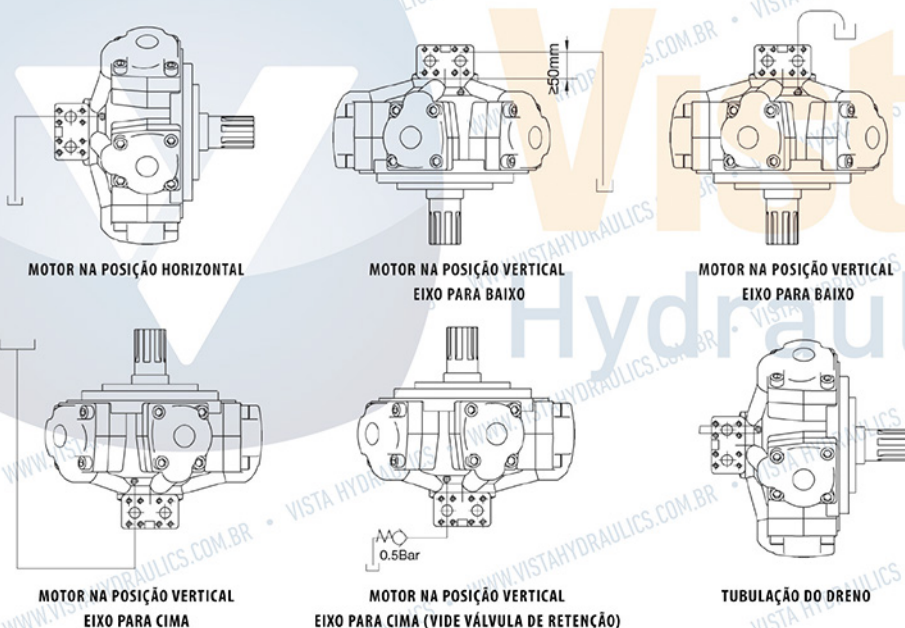
3. Temperatura do óleo deve ficar entre 25 a 55 ° C em condições normais de trabalho e não deve exceder a 65° C em operações intermitentes.

4. Sob condições normais, a pressão máxima é de 0,1 MPa (1 Bar). Se pressão for acima poderá danificar as vedações e selo mecânico e provocar vazamentos.

5. O motor pode por um determinado tempo trabalhar com uma contrapressão no máximo a 0,2 Mpa (2 Bar). Em caso de insuficiência contrapressão, o motor poderá trabalhar "não constante" em baixa rotação.

7. O motor não pode trabalhar como bomba em hipótese alguma.

## Posições do dreno na montagem do motor



### Notas!

1. A carcaça dos motor deve ser preenchida com fluido através do pórtilo do dreno antes de usar.

2. A posição do tubo dreno deve ser mais alta que a posição do motor. A tubulação do dreno deve ser ligada direto para tanque para que a contrapressão não seja elevada.