

# APOIO TOTAL AO MERCADO



## Caderninho Sabó

É o programa de relacionamento da Sabó com os profissionais da reparação automotiva em todo o Brasil. Além de informação e treinamento, oferece um exclusivo pacote de benefícios através do Top Card Sabó.



## TOC

Consultoria técnica Sabó ao mercado, solucionando qualquer dúvida técnica sobre o uso correto dos produtos, tecnologia, treinamentos e garantia.



## Programa Qualifica

Educação continuada, adaptada aos diferentes públicos, objetivando qualificação motivacional, estratégica e gerencial.



## RIA - Rede Interativa Automotiva

Canal de educação à distância (TV Sabó) com comunicação interativa e abrangência nacional, com conteúdo dirigido a temas técnicos, gerenciais e motivacionais.



## Giro na Fábrica

Programa de visitas à fábrica para apresentar a tecnologia, os recursos, as pessoas e os diferenciais de qualidade e produção da Sabó.



## Promotores Sabó

Equipe de apoio ao mercado atendendo: distribuidores, varejo, oficinas e retíficas, identificando parceiros e promovendo relacionamento através de um exclusivo pacote de benefícios.



## Agenda do Carro

Sabó, parceira oficial do Programa Agenda do Carro. Investindo na sua segurança, economia e bem estar, apoiando a manutenção preventiva do seu veículo.



## Sabó Indústria e Comércio de Autopeças Ltda

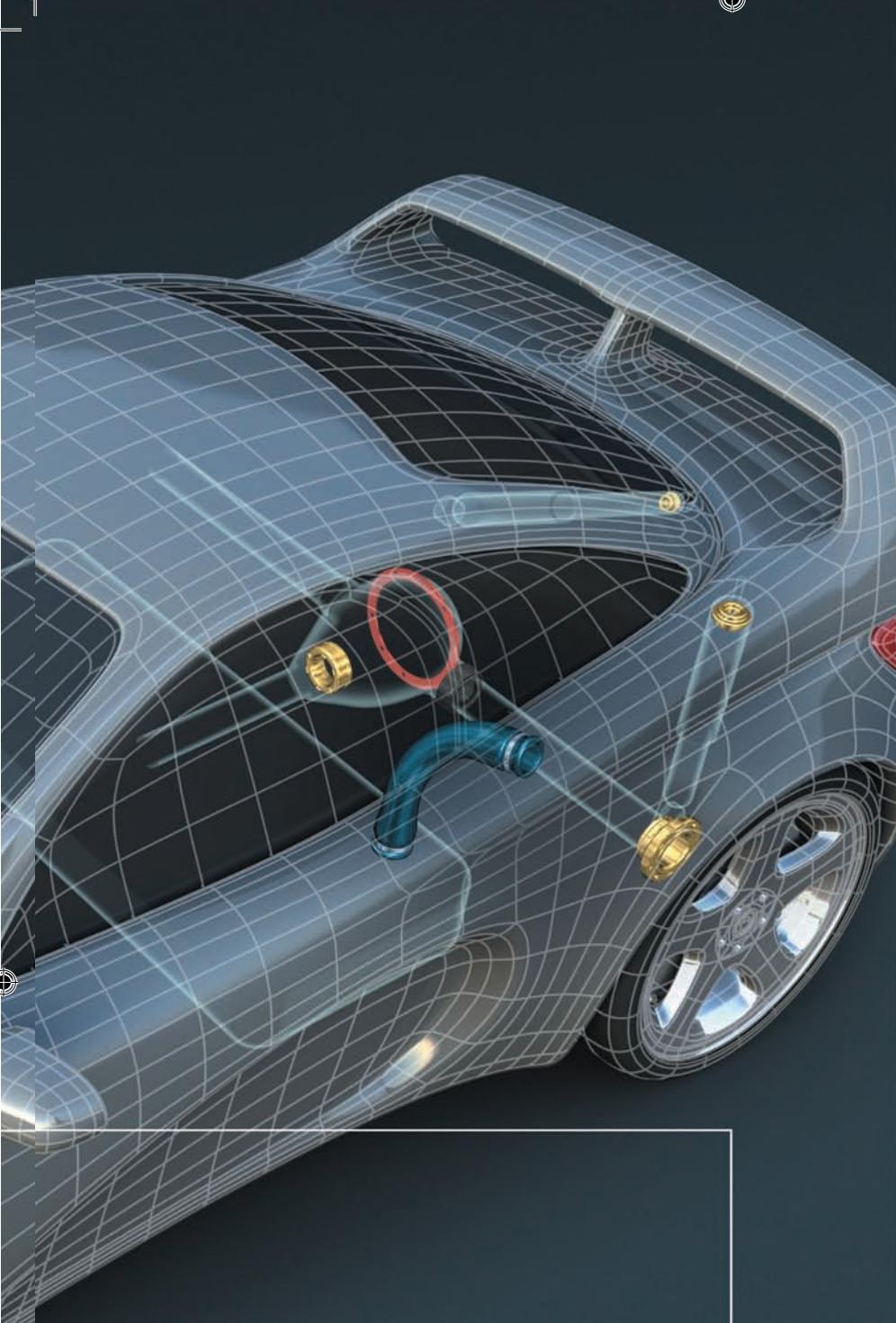
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**Central de Relacionamento Sabó**  
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# CATÁLOGO TÉCNICO

Technical Catalogue  
Catálogo Técnico





**As soluções do futuro.** Liderança, competitividade e soluções inovadoras de um lado, agilidade, performance, segurança e service do outro. Estes são os resultados que a excelência dos produtos Sabó garante aos seus clientes em qualquer lugar do mundo. Criado pela tecnologia da perfeição para abranger os mais variados mercados, o múltiplo portfólio de produtos garante a presença da Sabó no carro do futuro. Onde quer que ele apareça.

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**Las soluciones del futuro.** Liderazgo, competitividad y soluciones innovadoras por un lado, agilidad, performance, seguridad y servicio por el otro. Estos son los resultados que la excelencia de los productos Sabó garantiza a sus clientes en cualquier lugar del mundo. Creado por la tecnología de la perfección para abarcar los más variados mercados, el múltiple portfolio de productos garantiza la presencia de Sabó en el automóvil del futuro. Donde sea que éste aparezca.

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**Solutions for the Future.** Leadership, competitiveness and innovative solutions on one side, and performance, safety and service on the other. These are the results delivered by the excellence of Sabó's products to its clients anywhere in the world. Created by the technology of perfection to encompass a wide variety of markets, the multiple product portfolio ensures that Sabó will be present in automobiles of tomorrow. Wherever they show up.





#### **Liderando as soluções do futuro.**

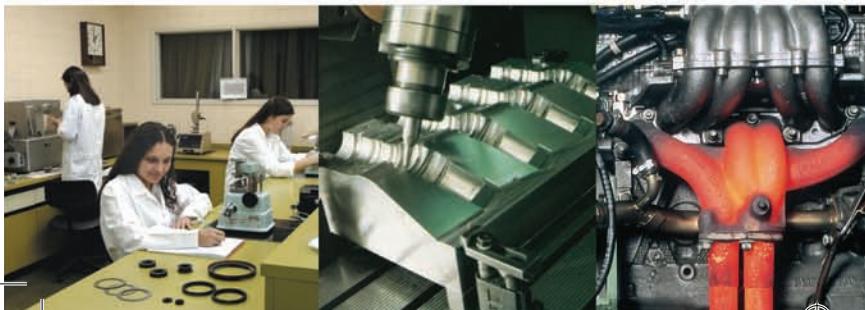
Fornecer produtos state-of-the-art e autocertificados exige que todos os integrantes do processo produtivo da Sabó, em qualquer parte do mundo, tenham a mesma filosofia: buscar sempre a tecnologia da perfeição. Esse pensamento global aliado a uma forte atuação local são complementados por investimentos em equipamentos de projetos e testes, softwares de última geração, qualificação profissional, pesquisa de materiais e engenharia avançada. Um conjunto de recursos que garante, em todas as fábricas da Sabó, certificação de qualidade conferida pelos mais rígidos padrões existentes.

#### **Liderando las soluciones del futuro.**

Suministrar productos state-of-the-art y autocertificados exige que todos los integrantes del proceso productivo de Sabó, en cualquier parte del mundo, tengan la misma filosofía: buscar siempre la tecnología de la perfección. Ese pensamiento global, aliado a una fuerte actuación local, se complementa con inversiones en equipos de desarrollo y ensayos, softwares de última generación, calificación profesional, investigación de materiales e ingeniería avanzada. Un conjunto de recursos que garantiza, en todas las fábricas de Sabó, la certificación de calidad conferida por los más rígidos estándares existentes.

#### **Leading the solutions of the future.**

To be a supplier of state-of-the-art products that are also self-certified requires that all members of Sabó's productive process anywhere in the world share the same philosophy: to always pursue the technology of perfection. This global attitude along with a strong local presence is complemented by investments in project and testing equipment, latest generation software, professional qualification, materials research and advanced engineering. A set of resources that ensures a certification of quality that is achieved by the strictest standards available today, in all of Sabó's plants.





**QUALIFICA**

SABÓ



**Construindo relações de valor com o mercado.** Relacionamento, qualificação e negócios são os pilares dos programas inovadores criados e implementados pela Sabó junto aos seus públicos para que eles prosperem cada vez mais em suas áreas de atuação. Investir em qualificação e reconhecer o mercado pelo seu compromisso e fidelidade com a Sabó significa investir também no futuro do nosso próprio negócio. Tanto que é da Sabó o pacote de serviços mais inovador e referência de mercado. Ele inclui sucessos consagrados como o Top Performance, o Caderninho Sabó, o Programa Qualifica além dos Consultores Técnicos, dos Promotores e da RIA: a Rede Interativa Automotiva, que garantem apoio integral aos profissionais.

**Construyendo relaciones de valor con el mercado.** Relaciones, calificación y negocios son los pilares de los programas innovadores creados e implementados por Sabó junto a sus públicos para que ellos prosperen cada vez más en sus áreas de actuación. Invertir en calificación y reconocer el mercado por su compromiso y fidelidad con Sabó significa invertir también en el futuro de nuestro propio negocio. Tanto es que es de Sabó el paquete de servicios más innovador y la referencia de mercado. Este incluye éxitos consagrados como el Top Performance, Caderninho Sabó, Cuadernito Sabó, el Programa Qualifica, Califica, además de los Consultores Técnicos, de los Promotores y de la RIA: la Red Automovilística Interactiva, que garantiza apoyo integral a los profesionales.

**Building a relationship of value with the market.** Relationship, qualification and business are the pillars of the innovative programs devised and implemented by Sabó with its clients so that they can increasingly excel in their fields of activity. To invest in qualifications and to acknowledge the market for its commitment and fidelity towards Sabó also means to invest in its own business. So much so that Sabó owns the most innovative package of services which has also become a reference in the market. It includes such acclaimed successes as the Top Performance, Caderninho Sabó (Sabó's Notebook) and the Qualifica (Qualifying Program) aside from the Technical Consultants, Promoters and the RIA, or the Interactive Automotive Network that ensures complete support for professionals.



Sabó-Group

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## **COMO UTILIZAR ESTE CATÁLOGO**

Para facilitar a sua consulta, os retentores deste manual foram divididos de acordo com os tipos (básicos, alternativos e especiais). Todas as seções começam com as ilustrações dos retentores em corte. Nas páginas seguintes, todos os dados técnicos, conforme a explicação abaixo.

# **COMO LOCALIZAR O RETENTOR DESEJADO**

## 1 - Tipos Básicos (páginas 41 a 56)

Conhecendo o diâmetro do eixo, localizá-lo na primeira coluna "Diâmetro do Eixo". Nesta mesma linha, você encontrará as informações complementares: diâmetro do alojamento, altura do retentor, número Sabó, tipo, orientação, material do lábio e a página onde está a figura do retentor em questão.

## **2 - Tipos Alternativos e Tipos Especiais (páginas 66 a 75)**

Cada grupo recebe o nome da função a que se destina o retentor. Procure entre os Grupos A/S o perfil do retentor desejado. Depois, conhecendo o diâmetro do eixo, localize as informações complementares, na mesma linha. As ilustrações antecedem as informações técnicas. Você encontra as figuras dos retentores dos tipos Alternativos nas páginas 58 a 62 e as figuras dos tipos Especiais nas páginas 62 a 65.

**3 - Índice**

No índice, página 10, você encontra todas as informações contidas neste catálogo, bem como as páginas onde estão os retentores, divididos por tipos e aplicação.

## 4 - Índice Numérico

Conhecendo o número Sabó, localize-o no índice numérico, onde você encontrará também o diâmetro do eixo. Caso o retentor procurado seja do tipo alternativo ou especial, estará indicado o grupo a que pertence. Para informações complementares, proceder como descrito nos itens 1 e 2.

## FUNÇÃO DO RETENTOR

O vedador de lábio ou retentor, como é usualmente conhecido, é composto essencialmente de uma membrana elastomérica em forma de "lábio" e uma parte estrutural metálica, que permite a fixação do lábio na posição correta de trabalho na aplicação.

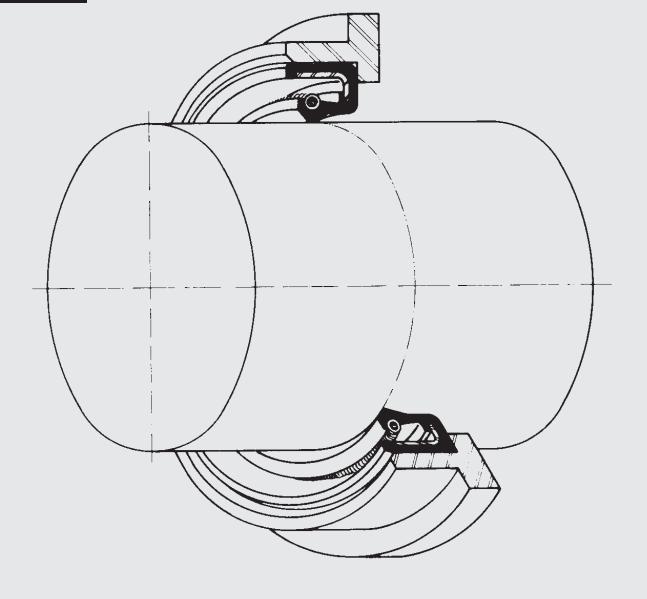
O retentor tem por função primordial reter óleos, graxas ou outros fluidos que devam ser contidos no interior de uma máquina ou um agregado mecânico.

O retentor é sempre aplicado entre duas peças que tenham um movimento relativo, por exemplo: entre um eixo que transmite um movimento e a carcaça de sustentação do mancal deste eixo (figura 1).

Ele cumpre esta função de vedação tanto na condição estática, de máquina parada, como na condição dinâmica, em movimento, e também na variedade de condições de temperatura e meio externo para as quais a máquina está projetada.

A vedação se dá pelo contato permanente que ocorre entre a aresta do lábio de vedação e o eixo da máquina. Para completar a estanqueidade com o meio externo, é preciso que haja também a vedação entre a parte externa estrutural do vedador e a carcaça.

Fig. 1



## CARACTERÍSTICAS DO LÁBIO DE VEDAÇÃO

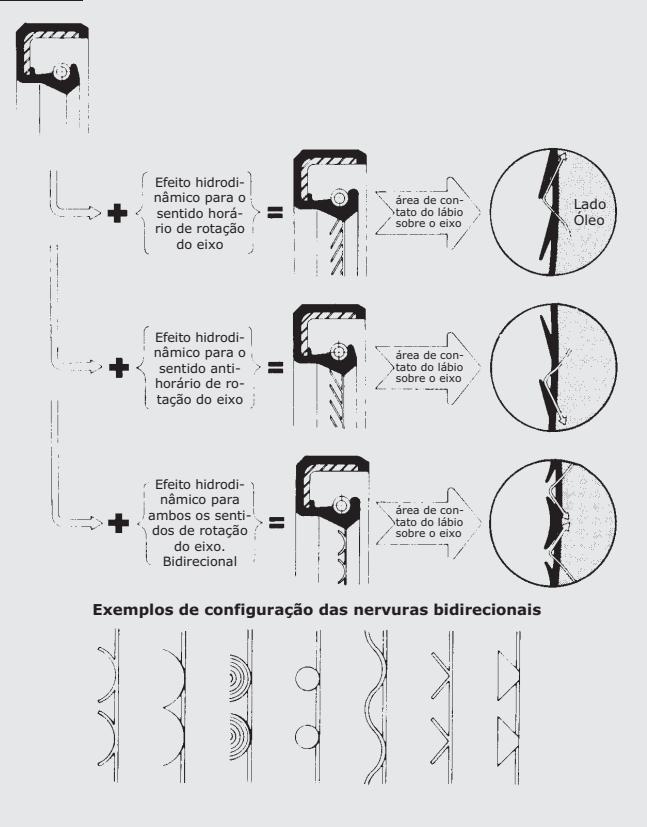
Partindo-se do lábio convencional como ilustrado na figura 2, pode-se obter uma maior eficiência de vedação adicionando-se nervuras moldadas ao ângulo de ar, que proporcionam o conhecido efeito hidrodinâmico de vedação.

Este efeito hidrodinâmico promove o refluxo ao óleo que, eventualmente, tenha ultrapassado a aresta de vedação, conferindo assim ao lábio uma maior capacidade de estanqueidade, e ainda, uma maior durabilidade, por garantir uma permanente lubrificação na área de contato sob a aresta de vedação.

Existem várias formas geométricas de nervuras hidrodinâmicas, cuja escolha é determinada pelas condições de aplicação do vedador.

Fig. 2

Ilustração do Efeito Hidrodinâmico



## MATERIAIS ELASTOMÉRICOS

Como já citado anteriormente, a vedação se dá por meio da interferência do lábio elastomérico sobre o eixo. Esta condição de trabalho provoca o aparecimento de uma força de atrito na área do lábio com a direção do movimento do eixo e sentido contrário ao mesmo.

A força de atrito e a velocidade periférica do eixo tornam-se responsáveis por uma geração de calor localizada na área de contato do lábio, que tende a promover a degeneração do material e o desgaste do lábio de vedação.

A contenção destes efeitos é conseguida primordialmente pela escolha correta do material elastomérico. É de suma importância que esta escolha seja definida em conjunto com o fabricante do vedador, pois há uma série de fatores de projeto que devem ser igualmente considerados para conferir uma vida prolongada ao vedador.

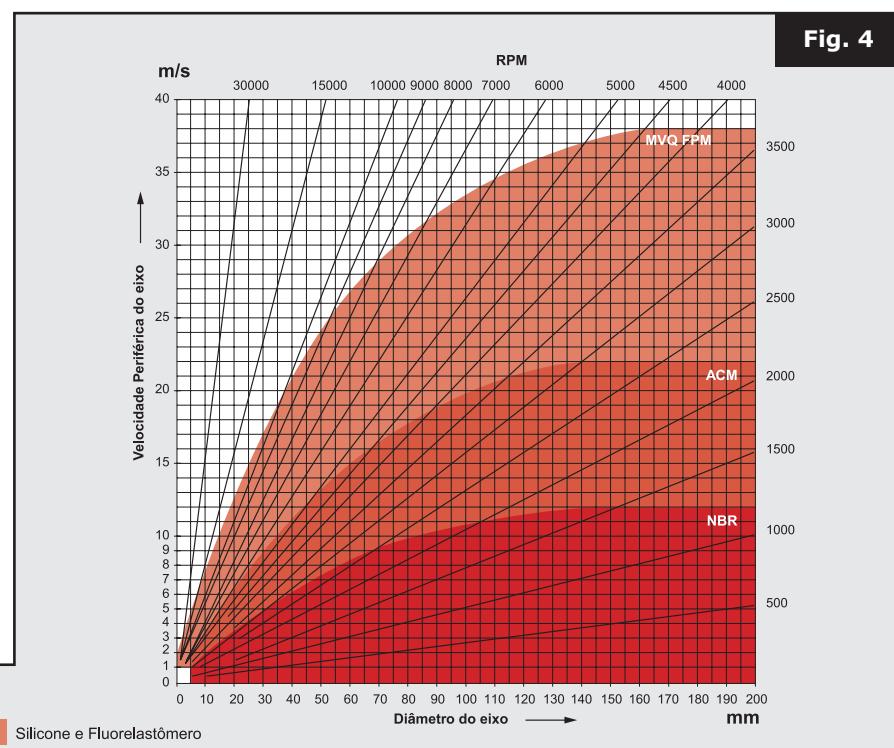
Na figura 3 estão mostradas as várias qualidades de elastômeros e recomendações genéricas de uso para os diferentes fluidos e limites de temperaturas de trabalho.

Código do elastômero, de acordo com as Normas ISO 1629 e DIN 3761	Tipo de Borracha	Limite de temperatura mínima de trabalho (°C)	Óleos para motor	Óleo para Caixa de Mudanças	Óleos Hipóides	Óleos p/ Transm. Automática (A.T.F.)	Graxa	Gasolina + Óleo Motor 2T	Álcool + Aditivos	Aplicações Gerais
			Limites de Temperatura máxima de trabalho (°C)							
NBR	Nitrílica	-35	110	110	110	120	90	100	100	Material normalmente utilizado para máquinas e equipamentos industriais. Muito utilizado na indústria automotiva para aplicações gerais.
ACM	Poliacrílica	-15	130	120	120	130	-	-	-	Material largamente utilizado para motores e transmissões na indústria automobilística.
MVQ	Silicone	-50	150	-	-	130	-	-	-	Material usualmente empregado em motores de elevado desempenho e em conversores de torque de transmissões automáticas.
FPM	Fluorelastômetro	-30	150	150	150	150	-	125	125	Material empregado em motores e transmissões, altamente solicitados.

Fig. 3

Na figura 4 é mostrado um gráfico que indica os limites de velocidade periférica do eixo para cada material, prevendo-se que haja uma boa lubrificação do lábio e também que a pressão interna da máquina seja praticamente igual à pressão externa.

Estas considerações para escolha do material elastomérico devem ser consideradas somente como uma orientação geral. Recomendamos portanto, que para cada nova aplicação de vedador, o projeto seja previamente discutido com a Engenharia de Produtos da Sabe.



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## RECOMENDAÇÕES QUANTO À APLICAÇÃO

### Execução do alojamento: (figura 5)

A seguir estão descritas as recomendações para execução do alojamento, as quais se aplicam todos os tipos de vedadores.

Para o diâmetro do furo do alojamento DF deve ser prevista a tolerância ISO H8.

O vedador geralmente é retido no alojamento por interferência entre os diâmetros do alojamento DF e o externo do DR e sua montagem deve ser executada com auxílio de uma prensa hidráulica. Os valores recomendados para esta interferência, bem como as tolerâncias de DF e DR, segundo a norma DIN 3761, estão mostrados na figura 6.

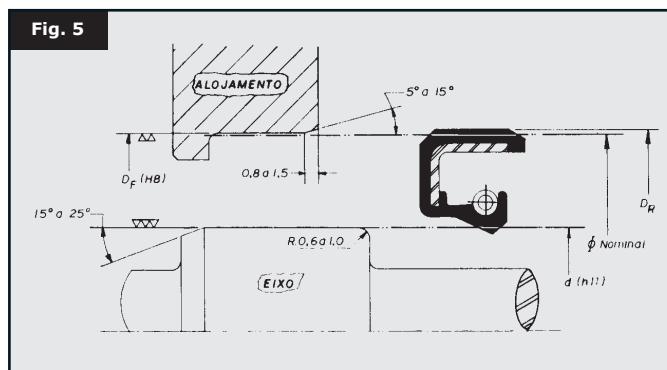
O acabamento da superfície do furo poderá ser obtido por usinagem fina com rugosidade de até RT 25u.

Deste modo será garantida uma boa retenção e estanqueidade entre o rententor e o alojamento.

Para se obter uma boa condição de montagem do retentor, deve ser previsto um chanfro de entrada no início do alojamento, com inclinação da ordem de 5° a 15°, numa profundidade de 0,8 mm mínimo. Os cantos desta superfície chanfrada deverão estar livres de rebarbas de usinagem.

### Execução do eixo de trabalho: (figura 5)

Para o diâmetro do eixo deverá ser prevista a tolerância, conforme recomendação da norma DIN 3761, ISO H11.



**Tolerância de  $D_F$  e  $D_R$  e interferência resultante**  
Dimensões em milímetro

**Fig. 6**

ø Nominal	Tol. $D_F$ (H8)	Retentor tipo BR		Retentor tipo BA ou B	
		Tol. $D_R$	Interferência Resultante	Tol. $D_R$	Interferência Resultante
> 10 a 18	0 + 27	+ 0,30 + 0,15	+ 0,300 + 0,123	+ 0,20 + 0,10	+ 0,200 + 0,073
> 18 a 30	0 + 33	+ 0,30 + 0,15	+ 0,300 + 0,117	+ 0,20 + 0,10	+ 0,200 + 0,067
> 30 a 50	0 + 39	+ 0,30 + 0,15	+ 0,300 + 0,111	+ 0,20 + 0,10	+ 0,200 + 0,061
> 50 a 80	0 + 46	+ 0,35 + 0,20	+ 0,350 + 0,154	+ 0,23 + 0,13	+ 0,230 + 0,084
> 80 a 120	0 + 54	+ 0,35 + 0,20	+ 0,350 + 0,146	+ 0,25 + 0,15	+ 0,250 + 0,096
> 120 a 180	0 + 63	+ 0,45 + 0,25	+ 0,450 + 0,187	+ 0,28 + 0,18	+ 0,280 + 0,117
> 180 a 300	0 + 72	+ 0,45 + 0,25	+ 0,450 + 0,178	+ 0,30 + 0,20	+ 0,300 + 0,128

### Exemplos de utilização:

— Cálculo de  $D_F = \phi + \text{Tol. } D_F$  ..... Ex.  $D_{F\min} = 65 + 0.000 = 65.000$

$$D_{F\max} = 65 + 0.046 = 65.046$$

— Cálculo de  $D_R = \phi + \text{Tol. } D_R$  ..... Ex.  $D_{R\min} = 65 + 0.200 = 65.200$

$$D_{R\max} = 65 + 0.350 = 65.350$$

Cálculo da Interferência Resultante:

$$\text{Int.}_{\max} = D_{R\max} - D_{F\min} \quad \text{Ex. } 65.350 - 65.000 = 0.350 = \text{Int.}_{\max}$$

$$\text{Int.}_{\min} = D_{R\min} - D_{F\max} \quad \text{Ex. } 65.200 - 65.046 = 0.154 = \text{Int.}_{\min}$$

## RECOMENDAÇÕES QUANTO À SUPERFÍCIE DO EIXO

Objetivando conferir uma boa durabilidade e eficiência de trabalho ao retentor, a superfície do eixo onde trabalho o lábio deverá atender as seguintes exigências:

- O acabamento final desta superfície deve ser obtido por operação de retífica de topo com valores de rugosidade RA dentro de 0,2 a 0,5u ou RT de 1,60 a 4,0u. Nesta operação de retífica, deverão ser evitados os movimentos transversais do rebolo, que possam imprimir riscos com orientação helicoidal na superfície do eixo.
- A superfície de trabalho do lábio do retentor deve ser isenta de danificações, tais como: batidas, sulcos, trincas, falhas de material, oxidações ou deformações.
- A dureza do eixo na região de trabalho do retentor deverá estar acima de **28 RC**.

Visando uma boa condição de montagem, de modo que o lábio do retentor não sofra danificações ou deformações no ato da instalação, é recomendável que os cantos dos eixos sejam chanfrados com inclinação de 15 a 25° ou arredondados com raio de 0,6 a 1,0mm na região que passa sob o lábio. Os cantos devem ser arredondados e livres de rebarbas.

É importante também que o lábio de vedação durante a instalação do vedador evite contato direto com regiões do eixo contendo rasgos de chaveta, entalhados ou com usinagem grosseira. Caso isto seja inevitável, deve-se prover uma luva protetora com superfície em seu diâmetro externo respeitando as mesmas recomendações sugeridas para o eixo de trabalho.

### Tolerâncias de excentricidade do alojamento:

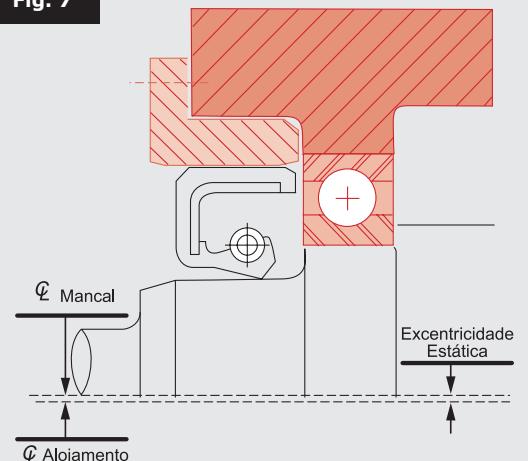
Devido a inevitáveis variações de usinagem do alojamento e do mancal, é previsto que haja uma certa excentricidade entre os mesmos. Em outras palavras, a linha de centro geométrico do alojamento do retentor não coincide exatamente com a linha de centro efetiva de giro do eixo (figura 7). A distância entre estas duas linhas de centros, assim definida como excentricidade estática, deverá ser mantida dentro dos limites estreitos indicados na figura 8.

### Tolerâncias de excentricidade do eixo:

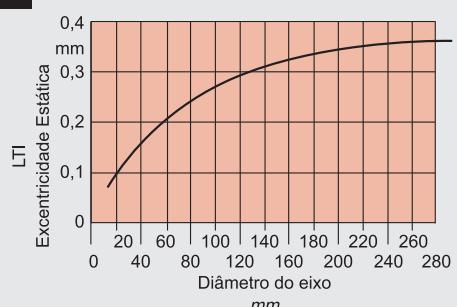
Igualmente é previsto que na usinagem do eixo haja uma certa excentricidade entre a linha de centro efetiva de giro do eixo e a linha de centro do diâmetro da pista de trabalho do retentor (figura 9). A excentricidade dinâmica, assim definida, também deverá estar contida dentro dos valores recomendados na figura 10.

Para valores muito acima dos recomendados, haverá o risco do lábio de vedação, devido à sua inércia, não conseguir manter o contato com o eixo. Principalmente no caso de elevadas velocidades angulares.

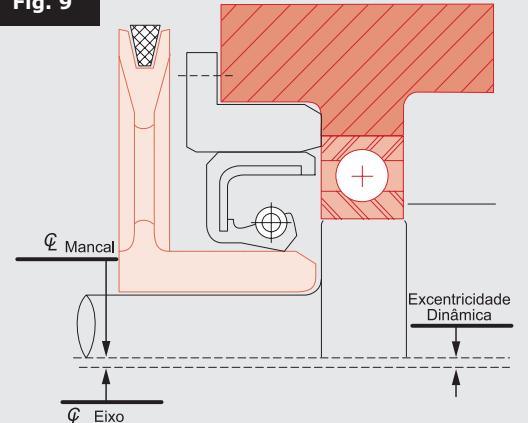
**Fig. 7**



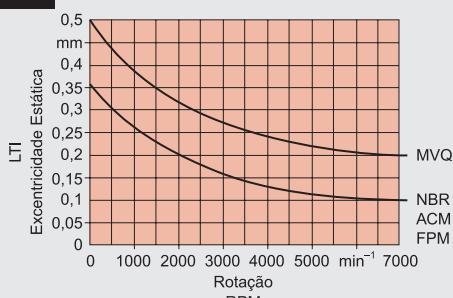
**Fig. 8**



**Fig. 9**



**Fig. 10**



## RECOMENDAÇÕES QUANTO ÀS CONDIÇÕES DE MONTAGEM

### 1 – Cuidados no armazenamento:

Durante o período de armazenamento, os retentores deverão ser mantidos na própria embalagem. Sabe, estocados em local limpo e de forma apropriada, com temperaturas médias recomendadas entre 10° a 40° C, livre de contaminações e manipulações desnecessárias que possam provocar deformações ou danificações.

### 2 – Cuidados na manipulação do retentor:

Ao ser desembalado para a montagem, recomenda-se todo cuidado possível para não tocar desnecessariamente no lábio de vedação, de modo a não introduzir deformações, danificações ou deposição de elementos estranhos na aresta de vedação que possam comprometer o bom desempenho na aplicação.

### 3 – Cuidados na pré-lubrificação do retentor:

Para garantir uma instalação perfeita do retentor no furo do alojamento e também para propiciar a lubrificação inicial da aresta de vedação, por ocasião dos primeiros giros no funcionamento do agregado, recomenda-se pré-lubrificar o lábio do retentor, no próprio fluido da aplicação, mantendo-o em recipiente apropriado e perfeitamente protegido de contaminações externas.

### 4 – Montagem do retentor no alojamento:

A prensagem do retentor na sede deverá ser feita mediante o uso de uma prensa mecânica ou hidráulica, utilizando-se dispositivos apropriados que atendam às seguintes recomendações:

- Deve-se garantir uma perfeita pré-centralização do retentor, de modo que o mesmo seja prensado na posição correta no alojamento.
- A superfície de apoio no dispositivo do retentor deverá estar o mais próximo possível do diâmetro externo do retentor, de modo a evitar deformações no ato da prensagem.
- De forma alguma o dispositivo deve danificar o lábio de vedação.

Na figura 11 estão ilustrados alguns tipos de dispositivos usualmente empregados.

### 5 – Montagem do retentor no eixo de trabalho:

Não havendo possibilidade de chanfrar ou arredondar as superfícies do eixo sobre as quais deve ser introduzido o retentor, ou então, no caso do retentor ter que passar obrigatoriamente por uma região irregular, como entalhados ou rasgos de chaveta, recomenda-se o uso de uma luva de proteção para o lábio, conforme ilustrado na figura 12, observando que o diâmetro da luva não deforme o lábio.

É de extrema importância que estas luvas estejam com as superfícies externas, por onde passa o lábio do retentor, bem polidas, perfeitamente limpas e livres de danificações ou arestas vivas, provocadas por batidas durante o seu manuseio constante.

### 6 – Cuidados na substituição do retentor:

Em princípio, sempre que houver a desmontagem de um agregado, por qualquer motivo que implique na desmontagem do retentor ou do eixo de trabalho após o uso, recomenda-se a reposição do retentor por um novo.

Quando a substituição do eixo não for possível, a aresta de vedação do novo retentor não deverá trabalhar na mesma pista deixada pelo retentor anterior. Sempre dever-se-á montá-lo deslocado para o lado interior, observando-se que o eixo esteja em perfeitas condições, livres de defeitos, deposições sólidas ou oxidação. Não lixar a superfície do eixo.

Muitas vezes, devido ao estado da superfície do furo do alojamento, é inevitável o uso de massa de vedação no externo do retentor para garantir a estanqueidade através do furo do alojamento.

Nestes casos deve-se tomar cuidado para que essa massa de vedação não atinja o lábio de vedação ou o eixo de trabalho, pois, em tais casos, poderá impedir o bom desempenho do retentor e acarretar vazamento.

Fig. 11

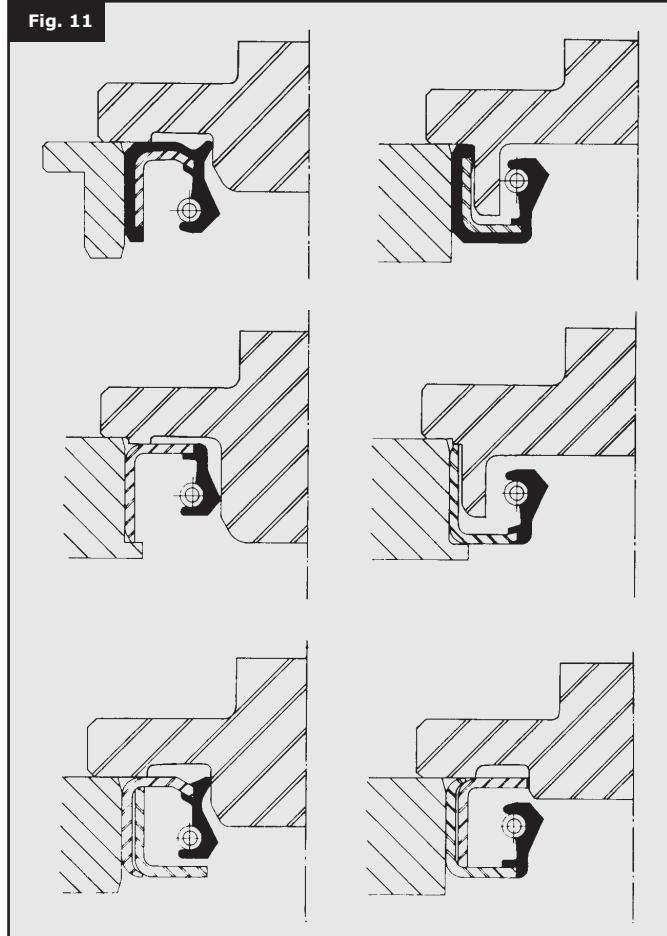
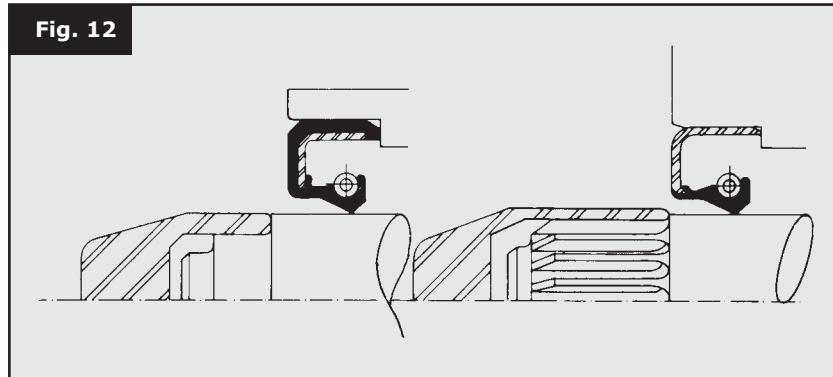


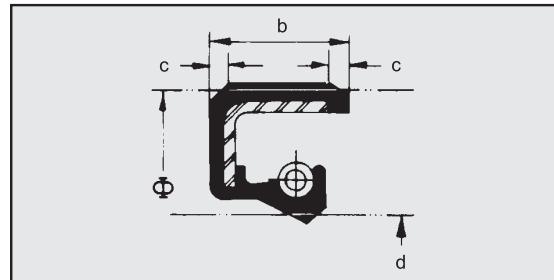
Fig. 12



## NORMATIZAÇÃO DE MEDIDAS DOS RETENTORES SEGUNDO A NORMA DIN 3761

Na figura 13 estão indicadas as medidas do diâmetro do eixo, diâmetro nominal do alojamento e altura dos retentores recomendados pela Norma DIN 3761.

**Fig. 13**



Diametro do eixo d	Φ	b	c min.
6	16 22	7	0.3
7	22	7	0.3
8	22 24	7	0.3
	22		
9	24 26	7	0.3
	22		
10	24 26	7	0.3
	22		
11	26	7	0.3
	22		
12	24 28	7	0.3
	30		
	24 28		
14	30 35	7	0.3
	26		
15	30 32	7	0.3
	35		
	28		
16	30 32	7	0.3
	35		
	28		
17	30 32	7	0.3
	35		
	40		
	30		
18	32 35	7	0.3
	40		
	28		
20	32 35	7	0.3
	40		
	47		
22	32 35	7	0.3
	40		
	47		
24	35 40	7	0.3
	47		
25	35 40	7	0.3
	42 47		
	52		
26	37 42	7	0.3
	47		
28	40 47	7	0.3
	52		

Diametro do eixo d	Φ	b	c min.
30	40 42 47 52 62	7	0.4
	45 47 52		
32	47 50 52 62	7	0.4
	47 50 52		
35	50 52 62	7	0.4
	47 50 52		
36	52 55 62	7	0.4
	52 55 62		
38	55 62	7	0.4
	55 62		
40	55 62 72	7	0.4
	55 62 72		
42	60 62 72	8	0.4
	60 62 72		
45	65 68 72	8	0.4
	65 68 72		
48	68 72	8	0.4
	68 72		
50	72 80	8	0.4
	72 80		
52	68 72	8	0.4
	68 72		
55	70 72 80	8	0.4
	70 72 80		
56	72 80 85	8	0.4
	72 80 85		
58	72 80	8	0.4
	72 80		
60	75 80 85	8	0.4
	75 80 85		
62	85 90	10	0.5
	85 90		
63	85 90	10	0.5
	85 90		
65	85 90 100	10	0.5
	85 90 100		
68	90 100	10	0.5
	90 100		

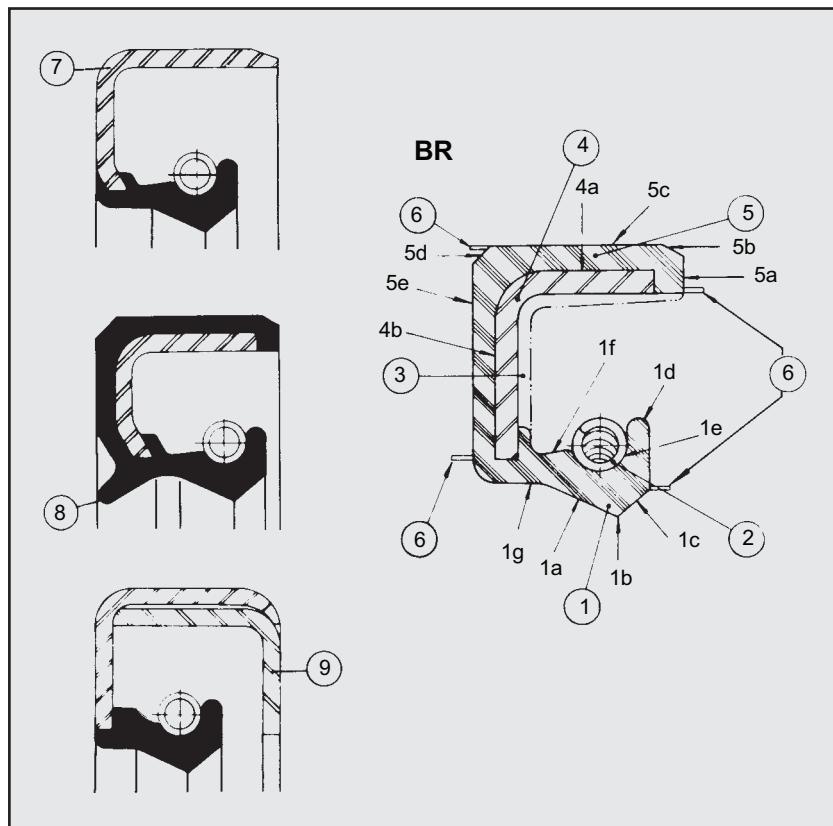
Diametro do eixo d	Φ	b	c min.
70	90 100	10	0.5
	95 100		
72	95 100	10	0.5
	95 100		
75	100 100	10	0.5
	100 100		
78	100 100	10	0.5
	100 100		
80	110 110	10	0.5
	110 110		
85	120 120	12	0.8
	110 120		
90	120 120	12	0.8
	120 120		
95	125 125	12	0.8
	120 125		
100	125 130	12	0.8
	130 130		
105	130 140	12	0.8
	140 140		
110	130 140	12	0.8
	140 140		
115	140 150	12	0.8
	150 150		
120	150 160	12	0.8
	160 160		
125	150 160	12	0.8
	160 160		
130	170 170	12	0.8
	170 170		
135	170 170	12	0.8
	170 170		
140	170 175	15	1
	175 175		
145	175 180	15	1
	180 180		
150	180 190	15	1
	190 190		
160	190 200	15	1
	200 200		
170	200 210	15	1
	210 210		
180	210 220	15	1
	220 220		
190	220 230	15	1
	230 230		
200	230 240	15	1
	240 240		
210	240 250	15	1
	250 250		
220	250 260	15	1
	260 260		
230	260 270	15	1
	270 270		
240	270 280	15	1
	280 280		
250	280 300	15	1
	300 300		
260	280 320	20	1
	320 320		
280	320 340	20	1
	340 340		
300	340 360	20	1
	360 360		
320	360 380	20	1
	380 380		
340	380 400	20	1
	400 400		
360	400 420	20	1
	420 420		
380	420 440	20	1
	440 440		
400	440 460	20	1
	460 460		
420	460 480	20	1
	480 480		
440	480 500	20	1
	500 500		
460	500 520	20	1
	520 520		
480	520 540	20	1
	540 540		

1) Tolerâncias permissíveis para  $\Phi$ , vide fig. 6

## CONCEITOS BÁSICOS DE CONSTRUÇÃO

### 1. Membrana elastomérica (ou lábio)

- 1.a. Ângulo de ar
- 1.b. Aresta de vedação
- 1.c. Ângulo de óleo
- 1.d. Região de cobertura da mola
- 1.e. Alojamento de mola
- 1.f. Região interna do lábio
- 1.g. Região de engaste do lábio



### 2. Mola de tração

### 3. Região interna do vedador, eventualmente recoberta por material elastomérico.

### 4. Anel de reforço metálico ou carcaça.

- 4.a. Porção cilíndrica de sustentação
- 4.b. Flange radial de engaste

### 5. Cobertura externa elastomérica

- 5.a. Borda
- 5.b. Chanfro da borda
- 5.c. Superfície cilíndrica externa ou diâmetro externo
- 5.d. Chanfro das costas
- 5.e. Costas

### 6. Filetes de escoamento de moldagem

### 7. Carcaça externa metálica

### 8. Vedação auxiliar

### 9. Carcaça interna metálica



## **ANOTAÇÕES**

**ANOTACIONES**  
**REMARKS**

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## COMO UTILIZAR ESTE CATALOGO

Para facilitar su consulta, los retenes de este manual están divididos de acuerdo a los tipos (básicos, alternativos y especiales). Todas las secciones comienzan con ilustraciones de los retenes en corte. En las páginas siguientes están todos los datos técnicos, conforme la explicación abajo.

## COMO LOCALIZAR EL RETÉN DESEADO

### 1 - Tipos Básicos (páginas 41 hasta 56).

Si conoce el diámetro del eje, puede localizarlo en la primera columna "Diámetro del eje". En esta misma línea, encontrará las informaciones complementarias: diámetro del alojamiento, altura del reten, número Sabó, tipo, orientación, material del labio y la página donde se encuentra la figura del reten deseado.

### 2 - Tipos Alternativos y Tipos Especiales (páginas 66 hasta 75)

Cada grupo tiene el nombre de la función a la que se destina el reten. Busque entre los Grupos A/S el perfil del reten deseado. Despues, conociendo el diámetro del eje, localice en la misma línea las informaciones complementarias. Las ilustraciones anteceden a las informaciones técnicas. Las figuras de los retenes de los tipos Alternativos están en las páginas 58 hasta 62 y las figuras de los tipos Especiales están en las páginas 62 hasta 65.

### 3 - Índice

En el índice, página 20, se encuentran todas las informaciones de este catálogo, así como las páginas donde se encuentran los retenes, divididas por tipos y por aplicación.

### 4 - Índice numérico

Si conoce el número Sabó, puede localizarlo en el índice numérico, donde usted también encontrará el diámetro del eje. Si el reten buscado es del tipo alternativo o especial, estará indicado el grupo al cual pertenece. Para informaciones adicionales, proceda conforme las explicaciones en los ítems 1 y 2.

CATÁLOGO DE RETENTORES / Catalogo De Retenes / Oil seals catalogue										TIPOS BÁSICOS / TIPOS BÁSICOS / STANDARD SEAL DESIGNS									
Tipos Básicos										TIPOS BÁSICOS TIPOS BÁSICOS STANDARD SEAL DESIGNS									
<b>TIPOS BÁSICOS / TIPOS BÁSICOS / STANDARD SEAL DESIGNS</b>										<b>TIPOS BÁSICOS</b>									
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## FUNCION DEL RETEN

El sellador de lábio o réten como es usualmente conocido, está compuesto esencialmente de una membrana elastomérica en forma de "lábio" y una parte estructural metálica, que permite la fijación correcta de trabajo en la aplicación.

El retén del labio en la posición correcta de trabajo en la aplicación.

El retén tiene por función primordial retener aceites, grasas u otros fluidos que deban ser contenidos en interior de una máquina o conjunto mecánico.

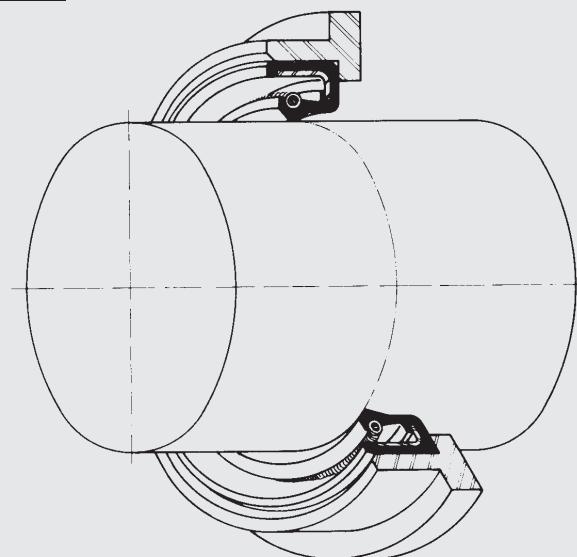
El retén es siempre aplicado entre dos piezas que tengan un movimiento relativo, por ejemplo : entre un eje que transmite un movimiento y una carcasa de sustentación de este eje (figura 1).

El mismo cumple esta función de retención tanto en condición estática, de máquina parada, como en condición dinámica, en movimiento, y también con variedad de condiciones de temperatura y medio externo para las cuales la máquina está proyectada.

El sellado se da por el contacto á proyectada.

El sellado se da por el contacto permanente que ocurre entre la arista del labio de retención y el eje de la máquina. Para completar la estanqueidad con el medio externo, es preciso que exista también un sellado entre la parte externa estructural del retén y la carcasa.

Fig. 1



## CARACTERISTICA DEL LABIO DE RETENCION

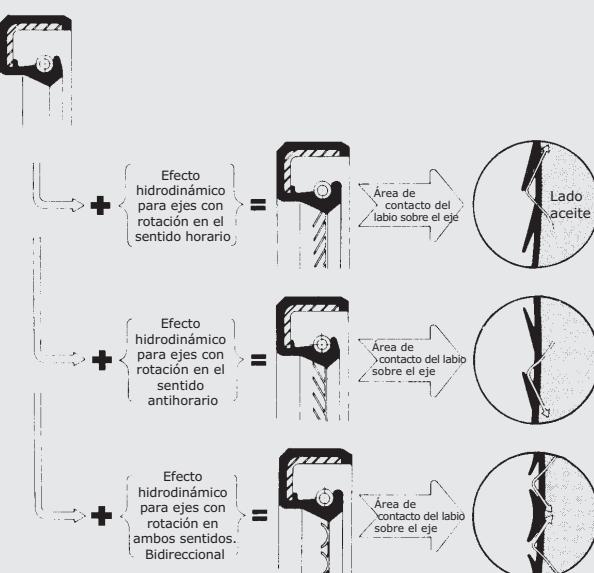
Partiendo de un labio convencional como el ilustrado en la figura 2, se puede obtener una mayor eficiencia de sellado adicionando nervaduras moldeadas en el ángulo de aire, que proporcionan el conocido efecto hidrodinámico de retención.

Este efecto hidrodinámico promueve un reflujo de aceite que, eventualmente, haya traspasado la arista de retención, confiriendo así al labio una mayor capacidad de estanqueidad, y además, una mayor durabilidad, por garantizar una permanente lubrificación en el área de contacto sobre la arista de retención.

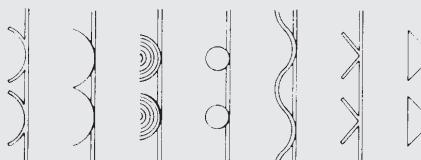
Existen varias formas geométricas de nervaduras hidrodinámicas, cuya elección es determinada por las condiciones de aplicación de reten.

Fig. 2

Ilustración del Efecto Hidrodinámico



Ejemplos de configuraciones de las nervaduras bidireccionales



## MATERIALES ELASTOMERICOS

Como se ha citado anteriormente, el sellado se da por medio de la interferencia del labio elastomérico sobre el eje.

Esta condición de trabajo provoca la aparición de una fuerza de fricción en el área del labio con dirección del movimiento del eje y sentido contrario al mismo.

La fuerza de fricción y la velocidad periférica del eje son responsables por una generación de calor localizada en el área de contacto del labio, que tiende a promover una degeneración del material y el desgaste del labio de retención.

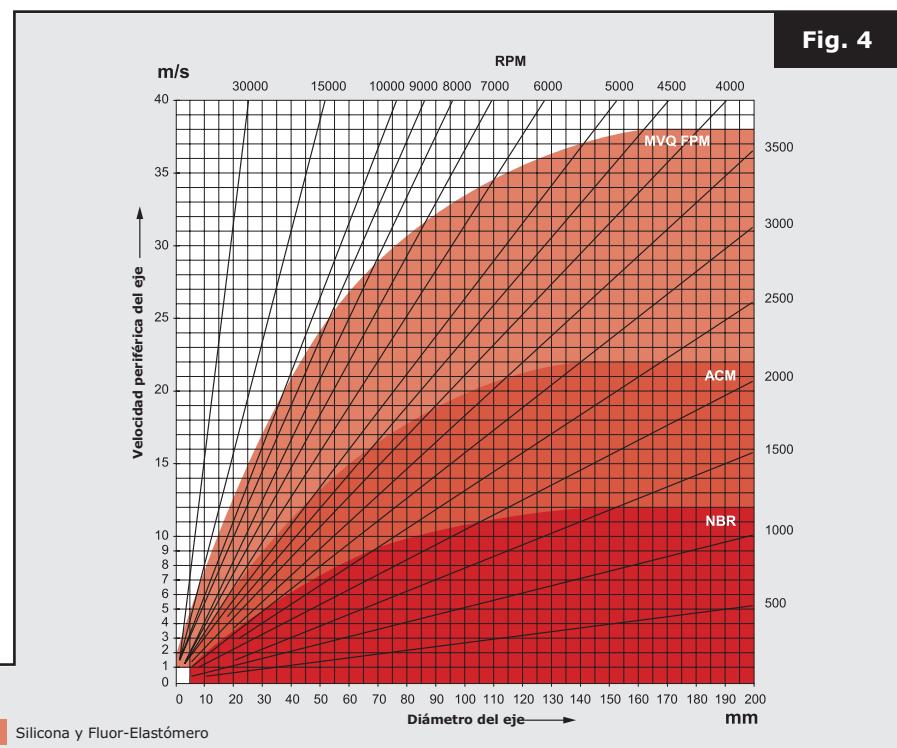
La contención de estos efectos se consigue primordialmente por la elección correcta del material elastomérico. Es de suma importancia que esta elección sea definida en conjunto con el fabricante del retén, pues hay una serie de factores de proyecto que deben ser igualmente considerados para conferir una vida prolongada al mismo.

En la figura 3 se muestran las cualidades de los elastómeros y las recomendaciones genéricas de uso para los diferentes fluidos y límites de temperaturas de trabajo.

Código del elastómero, conforme las Normas ISO 1629 y DIN 3761	Tipo de caucho	Límites de temperatura mínima de trabajo (°C)	Límites de temperatura máxima de trabajo (°C)							Aplicaciones generales	Fig. 3
			Aceites para motor	Aceites para cajas de cambio	Aceites hipoides	Aceites para transm. automática (A.T.F)	Grasas	Nortas + aceite motor 2T	Alcohol + Aditivos		
NBR	Nitrílico	-35	110	110	110	120	90	100	100	Material normalmente usado en máquinas industriales. Muy usado en la industria automovilística para aplicaciones generales	
ACM	Poliacrílico	-15	130	120	120	130	-	-	-	Material ampliamente usado en motores y transmisiones en la industria automovilística	
MVQ	Silicona	-50	150	-	-	130	-	-	-	Material ampliamente usado en motores de alto rendimiento y en conversores de momento de transmisiones automáticas.	
FPM	Flúor elastómero	-30	150	150	150	150	-	125	125	Material usado en motores y transmisiones, en aplicaciones con altas exigencias	

En la figura 4 se muestra un ábaco que indica los límites de velocidad periférica del eje para cada material, previéndose que exista una buena lubricación del labio y también que la presión interna de la máquina sea prácticamente igual a la presión externa.

Estas consideraciones para la elección del material elastomérico deben ser consideradas solamente como una orientación general. Recomendamos por lo tanto, que para cada nueva aplicación del retén, el proyecto sea previamente discutido con ingeniería de producto de sabó.



CONFORME NORMA DIN 3761

NBR      Nitrílico    ACM      Poliacrílico    MVQ y FPM      MVQ y Fluor-Elastómero

## RECOMENDACIONES EN CUANTO A APLICACIÓN

### Ejecución del alojamiento: (figura 5)

A continuación están indicadas las recomendaciones para la ejecución del alojamiento, las cuales se aplican a todos los tipos de selladores.

Para el diámetro del agujero del alojamiento DF debe ser prevista la tolerancia ISO H8.

El retén generalmente es mantenido en el alojamiento por la interferencia entre los diámetros de alojamiento DF y externo del retén DR y su montaje debe ser ejecutado con auxilio de una prensa hidráulica. Los valores recomendados para esta interferencia, así como las tolerancias de DF y DR, según norma DIN 3761, son mostrados en la figura 6.

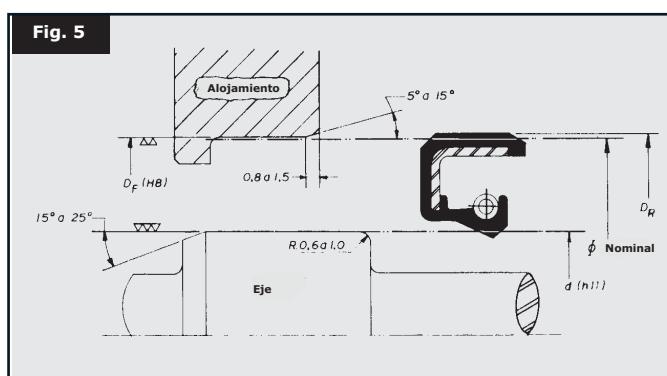
La terminación de la superficie del agujero podrá ser obtenida por maquinado fino con una rugosidad da hasta RT 25.

De este modo será garantizada una buena retención y estanquedad entre el retén y el alojamiento.

Para obtener una buena condición de montaje del retén, se debe prever un chanfle de entrada al inicio del alojamiento, con ángulo del orden de 5° a 15° y una profundidad de 0,8mm. Mínimo . los cantos de esta superficie chanfleada deberán estar libres de rebabas de maquinado.

### Ejecución del eje de trabajo: (figura 5).

Para el diámetro del eje d deberá ser prevista una tolerancia , según recomendación de la norma DIN 3761, ISO H 11.



**Tolerancia de DF y DR e interferencia resultante  
Dimensiones en milímetros**

**Fig. 6**

ø Nominal	Retén tipo BR		Retén tipo BA o B		
	Tol. D <sub>F</sub> (H8)	Tol. D <sub>R</sub>	Interferencia Resultante	Tol. D <sub>R</sub>	
> 10 a 18	0 + 27	+ 0,30 + 0,15	+ 0,300 + 0,123	+ 0,20 + 0,10	+ 0,200 + 0,073
> 18 a 30	0 + 33	+ 0,30 + 0,15	+ 0,300 + 0,117	+ 0,20 + 0,10	+ 0,200 + 0,067
> 30 a 50	0 + 39	+ 0,30 + 0,15	+ 0,300 + 0,111	+ 0,20 + 0,10	+ 0,200 + 0,061
> 50 a 80	0 + 46	+ 0,35 + 0,20	+ 0,350 + 0,154	+ 0,23 + 0,13	+ 0,230 + 0,084
> 80 a 120	0 + 54	+ 0,35 + 0,20	+ 0,350 + 0,146	+ 0,25 + 0,15	+ 0,250 + 0,096
> 120 a 180	0 + 63	+ 0,45 + 0,25	+ 0,450 + 0,187	+ 0,28 + 0,18	+ 0,280 + 0,117
> 180 a 300	0 + 72	+ 0,45 + 0,25	+ 0,450 + 0,178	+ 0,30 + 0,20	+ 0,300 + 0,128

### Ejemplos de utilización:

— Cálculo de D<sub>F</sub> = ø + Tol. D<sub>F</sub> ..... Ex. D<sub>Fmin</sub> = 65 + 0.000 = 65.000

$$D_{F\max} = 65 + 0.046 = 65.046$$

— Cálculo de D<sub>R</sub> = ø + Tol. D<sub>R</sub> ..... Ex. D<sub>Rmin</sub> = 65 + 0.200 = 65.200

$$D_{R\max} = 65 + 0.350 = 65.350$$

### Cálculo de la Interferencia Resultante:

$$Int_{\max} = D_{R\max} - D_{F\min} \dots \text{Ex. } 65.350 - 65.000 = 0.350 = Int_{\max}$$

$$Int_{\min} = D_{R\min} - D_{F\max} \dots \text{Ex. } 65.200 - 65.046 = 0.154 = Int_{\min}$$

## RECOMENDACIONES EN CUANTO A SUPERFICIE DEL EJE

Buscando conferir una buena duración y eficiencia de trabajo al retén, la superficie del eje donde trabaja el labio deberá atender las siguientes exigencias.

- La terminación final de esta superficie debe ser obtenida por operación de rectificado a tope con valores de rugosidad Ra dentro de 0,2 a 0,5, ó Rt de 1,60 a 4,0. en esta operación de rectificado, deberán ser evitados los movimientos transversales de la piedra, que puedan imprimir surcos con orientación helicoidal en la superficie del eje.

- La superficie de trabajo del retén debe estar exenta de imperfecciones tales como: golpes, rayas, surcos, fallas de material, oxidación o deformaciones.

- La dureza del eje en la zona de trabajo del retén deberá estar arriba de **28 Rc**.

Buscando una buena condición de montaje, de modo que el labio del retén no sufra daños o deformaciones en el acto de instalación, es recomendable que los cantos de los ejes sean chanfleados con ángulo de 15 a 25° o redondeados con radio de 0,6 a 1,0mm. En la zona que pasa sobre el labio. Los cantos deben ser redondeados y libres de rebabas.

Es importante también que el labio de sellado la instalación del retén evite contacto directo con regiones del eje que contengan chaveteros, entalhados o con maquinado grueso. En caso de que esto sea inevitable, se deberá proveer una funda protectora con superficie y diámetro externo respetando las mismas recomendaciones sugeridas para el eje de trabajo.

### Tolerancias de excentricidad del alojamiento:

Debido a inevitables variaciones de mecanizado del alojamiento y del cojinete, está previsto que haya una cierta excentricidad entre los mismos. En otras palabras, la línea de centro geométrico del alojamiento del retén no coincide exactamente con la línea de centro efectiva de giro del eje (figura 7). La distancia entre estas dos líneas de centros, definida como excentricidad estática, deberá de mantenerse dentro de los límites estrictos indicados en la figura 8.

### Tolerancias de excentricidad del eje:

Igualmente está previsto que en mecanizado del eje exista una cierta excentricidad entre la línea de centro efectiva de giro del eje y la línea de centro del diámetro de la pista de trabajo del retén (figura 9). La excentricidad dinámica, así definida, también deberá estar acotada dentro de los valores recomendados en la figura 10.

Para valores muy arriba de los recomendados, existirá el riesgo del labio de retención, debido a su inercia, de no conseguir mantener el contacto con el eje. Principalmente en el caso de elevadas velocidades angulares.

Fig. 7

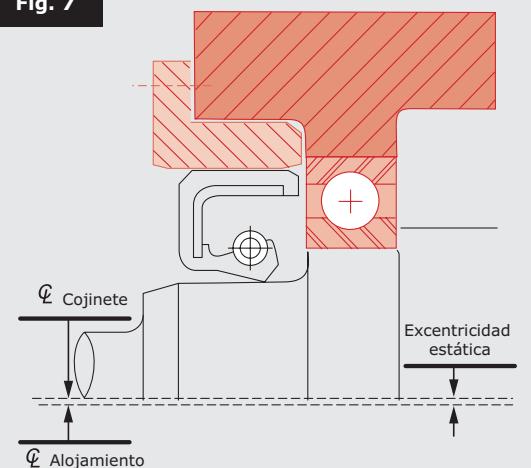


Fig. 8



Fig. 9

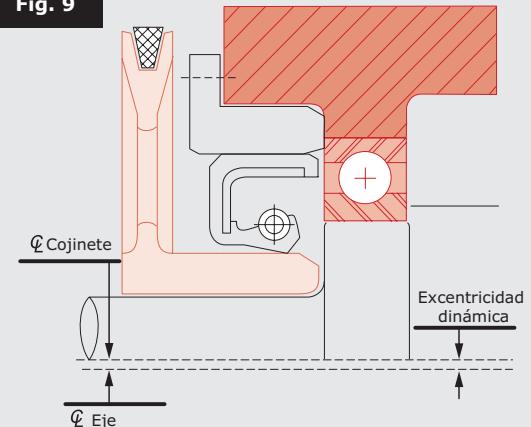
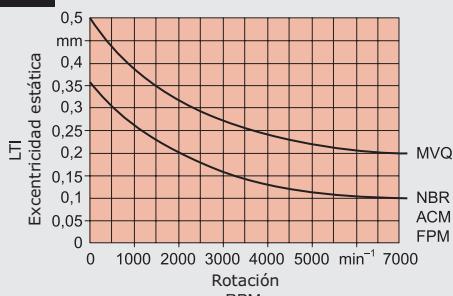


Fig. 10



## RECOMENDACIONES EN CUANTO A CONDICIONES DE MONTAJE

### 1 – Cuidados en el almacenamiento

Durante el período de almacenamiento, los retenes deberán ser mantenidos en su propio embalaje sabó, conservados en lugar limpio y de forma apropiada, con temperaturas medias recomendadas entre 10° a 40° C, libres de contaminaciones y manipulaciones innecesarias, que puedan provocar deformaciones o daños.

### 2 – Cuidados en la manipulación del retén

Al ser desembalado para el montaje, se recomienda tener todo el cuidado posible para no tocar innecesariamente el labio de retención, de modo de no introducir deformaciones, daños o deposición de elementos extraños en la arista de sellado, que puedan comprometer el buen desempeño en la aplicación.

### 3 – Cuidados en la pre-lubricación del retén

Para garantizar una instalación perfecta del retén en el agujero de alojamiento y también para propiciar una lubricación inicial de la arista de sellado, en los primeros giros de funcionamiento, se recomienda pre-lubricar el labio del retén, con el propio fluido de aplicación, manteniendo en recipiente apropiado y perfectamente protegido de contaminaciones externas.

### 4 – Montaje del retén en el alojamiento

La instalación del retén en su sede deberá ser efectuada mediante el uso de una prensa macánica o hidráulica, utilizando dispositivos apropiados que atiendan las siguientes recomendaciones.

- Debe garantizar un perfecto centrado del retén, de modo que el mismo sea instalado en la posición correcta del alojamiento.
- La superficie de apoyo del dispositivo del retén deberá estar lo más próximo posible del diámetro externo del retén, a fin de evitar deformaciones en la operación de clacado.
- De ninguna forma el dispositivo debe dañar el labio de retención.

En la figura 11 están ilustrados algunos tipos de dispositivos usualmente empleados.

### 5 – Montaje del retén en el eje de trabajo:

No habiendo posibilidad de chanflear o redondear las superficies del eje sobre las cuales debe ser introducido el retén, o también, en el caso que el retén debiera pasar obligatoriamente por una zona irregular, como entallados o chaveteros, se recomienda el uso de una funda de protección para el labio, según lo ilustrado en la figura 12, cuidando que el diámetro de la funda no deforme el labio.

Es de extrema importancia que estas fundas tengan las superficies externas, por donde pasa el labio del retén, bien pulidas, perfectamente limpias y libres de daños o aristas vivas, provocadas por golpes durante su manipuleo constante.

### 6 – Cuidados en el cambio del retén:

En principio, siempre que se efectúe el desmontaje de un conjunto, por cualquier motivo que implique el desmontaje del retén y del eje de trabajo después del uso, se recomienda la reposición del retén por uno nuevo.

Cuando la substitución del eje no fuera posible, la arista del sellado del nuevo retén no deberá trabajar en la misma pista dejada por el retén anterior. Siempre se lo deberá montar desfasado para el lado inferior, observando que el eje se encuentre en perfectas condiciones, libre de defectos, deposiciones sólidas u oxidación. No lijar la superficie del eje.

Muchas veces, debido al estado de la superficie del agujero del alojamiento, es inevitable el uso de selladores para el exterior del retén a fin de garantizar la estanqueidad a través del alojamiento.

En estos casos se debe tener cuidado para que ese sellador no toque el labio de retención o el eje de trabajo, por cuanto, en tales casos, podrá impedir un buen desempeño del retén y acarrear pérdidas.

Fig. 11

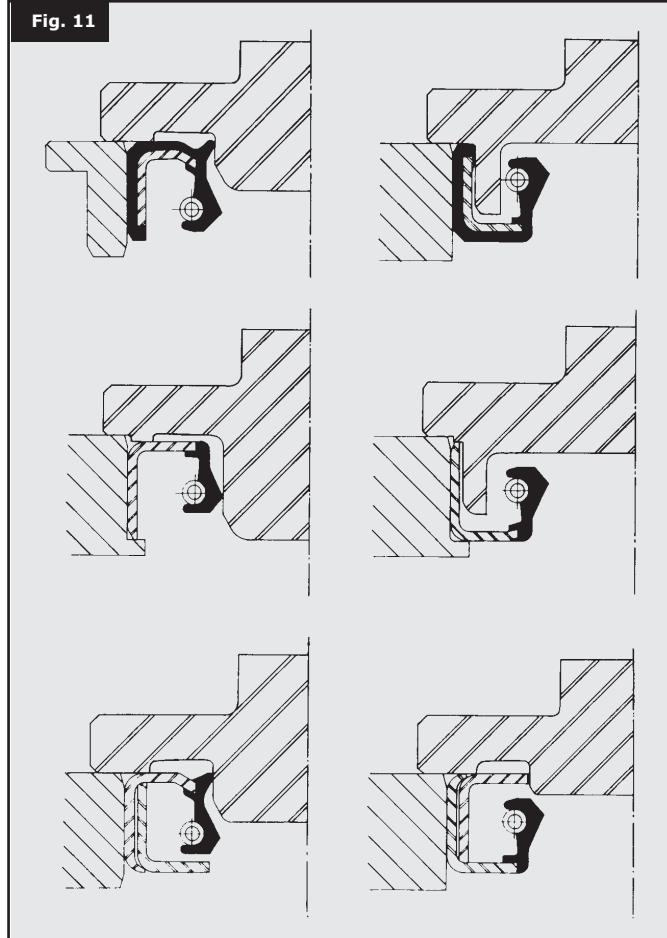
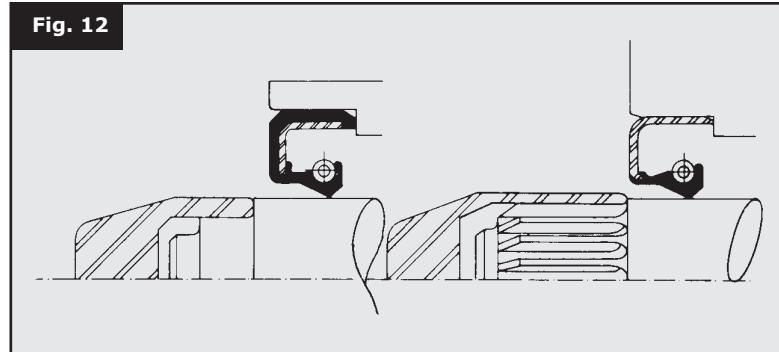


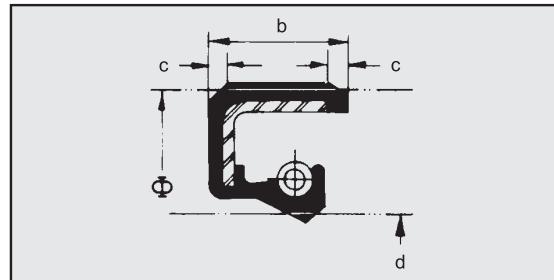
Fig. 12



## NORMALIZACION DE MEDIDAS DE RETENES SEGUN NORMA DIN 3761

En la figura 13 están indicadas las medidas de diámetro del eje, diámetro nominal del alojamiento y altura de retenes recomendados por la Norma DIN 3761.

**Fig. 13**



Diámetro del eje d	Φ	b	c min.
6	16	7	0.3
	22		
7	22	7	0.3
	22		
8	22	7	0.3
	24		
9	22	7	0.3
	24		
	26		
10	22	7	0.3
	24		
	26		
11	22	7	0.3
	26		
12	22	7	0.3
	24		
	28		
14	22	7	0.3
	24		
	30		
15	24	7	0.3
	28		
	35		
16	26	7	0.3
	30		
	32		
17	28	7	0.3
	30		
	32		
18	30	7	0.3
	32		
	35		
20	35	7	0.3
	32		
	40		
22	35	7	0.3
	32		
	40		
24	35	7	0.3
	37		
	40		
25	35	7	0.3
	40		
	42		
26	37	7	0.3
	42		
	47		
28	35	7	0.3
	40		
	47		
28	40	7	0.4
	47		
	52		

Diámetro del eje d	Φ	b	c min.
30	40	7	0.4
	42		
32	47	7	0.4
	52		
35	45	7	0.4
	47		
36	50	7	0.4
	52		
38	62	7	0.4
	65		
40	55	7	0.4
	58		
42	62	8	0.4
	72		
45	60	8	0.4
	62		
48	65	8	0.4
	72		
50	72	8	0.4
	80		
52	68	8	0.4
	72		
55	70	8	0.4
	72		
56	72	8	0.4
	80		
58	75	8	0.4
	80		
60	85	8	0.4
	90		
62	85	10	0.5
	90		
63	85	10	0.5
	90		
65	85	10	0.5
	90		
68	90	10	0.5
	100		

Diámetro del eje d	Φ	b	c min.
70	90	10	0.5
	100		
72	95	10	0.5
	100		
75	95	10	0.5
	100		
78	100	10	0.5
	100		
80	110	10	0.5
	110		
85	110	12	0.8
	120		
90	110	12	0.8
	120		
95	120	12	0.8
	125		
100	120	12	0.8
	125		
105	130	12	0.8
	140		
110	130	12	0.8
	140		
115	140	12	0.8
	150		
120	150	12	0.8
	160		
125	150	12	0.8
	160		
130	160	12	0.8
	170		
135	170	12	0.8
	180		
140	170	15	1
	180		
145	175	15	1
	180		
150	180	15	1
	190		
160	190	15	1
	200		
170	200	15	1
	210		
180	210	15	1
	220		
190	220	15	1
	230		
200	230	15	1
	240		
210	240	15	1
	250		
220	250	15	1
	260		
230	260	15	1
	270		
240	270	15	1
	280		
250	280	15	1
	300		
260	300	20	1
	320		
280	320	20	1
	340		
300	340	20	1
	360		
320	360	20	1
	380		
340	380	20	1
	400		
360	400	20	1
	420		
380	420	20	1
	440		
400	440	20	1
	460		
420	460	20	1
	480		
440	480	20	1
	500		
460	500	20	1
	520		
480	520	20	1
	540		

1) Tolerancias admisibles para  $\Phi$ , ver fig. 6

# **CONCEPTOS BASICOS DE CONSTRUCCION**

## **1. Membrana elastomérica (o labio)**

- 1.a. Angulo de aire
  - 1.b. Arista de retención
  - 1.c. Angulo de aceite
  - 1.d. Región cubreresorte
  - 1.e. Alojamiento del resorte
  - 1.f. Región interna del labio
  - 1.g. Región de sujeción del labio

## 2. Resorte de tracción

### **3. Región interna del retén, eventualmente recubierta por material elastomérico.**

#### **4. Aro de refuerzo metálico o carcaza.**

- 4.a. Porción cilíndrica de sustentación
  - 4.b. Flanco radial de sujeción

## **5. Cobertura externa elastomérica**

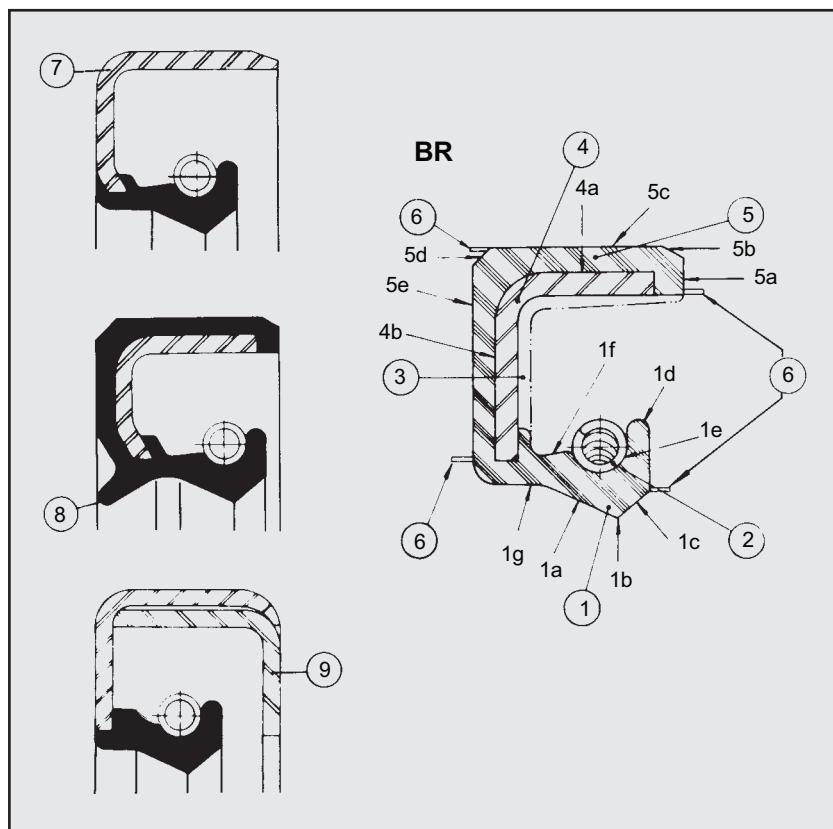
- 5.a. Borde superior
  - 5.b. Chanfle del borde superior
  - 5.c. Superficie cilíndrica externa o  
diámetro externo
  - 5.d. Chanfle del borde inferior
  - 5.e. Borde inferior

## 6. Rebabas de moldeo

## **7. Carcaza externa metálica**

#### **8. Retención auxiliar o labio guardapolvo**

#### **9. Carcaza interna metálica**





## **ANOTAÇÕES**

**ANOTACIONES**  
**REMARKS**

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## **HOW TO USE THIS CATALOGUE**

In order to speed up your parts look-up, the retainers contained in this manual were divided according to their types (basic, alternative and special). All sections begin with cross-section illustrations of each retainer. The next pages will bring forth their technical specifications as explained below.

## HOW TO LOCATE THE DESIRED RETAINER

## **1 – Basic Types (pages 40 through 56)**

If you know the axle's diameter, you can locate it in the first column called "Axle Diameter". On the same line, you will find further information such as: housing diameter, retainer height, Sabó part number, guidelines, lip materials, and the page on which you will find a picture of this retainer.

## **2 – Alternative and Special Types (pages 66 through 75)**

Each group receives a name according to the function intended for that particular retainer. Find the retainer profile you need by perusing through Groups A/R. Then, once you have the axle's diameter, you can easily find the complementary information you need along the same line. All illustrations precede the technical specs. You can find the pictures depicting Basic Type retainers on pages 58 through 62 and Special Types on pages 62 through 65.

3 - Index

On page 30, there's a handy index where you'll find all the information you need, listing all the retainers contained in this catalog by page, type and application as well as other useful information.

## **4 – Part Number index**

With the Sabó part number in hand you can also look-up this number in the Part Number index to find the axle diameter. If the desired retainer is of the Special or Alternative Type, the appropriate group will also be displayed. For more information, please follow the steps outlined in items 1 and 2 above.

## OIL SEAL FUNCTIONS

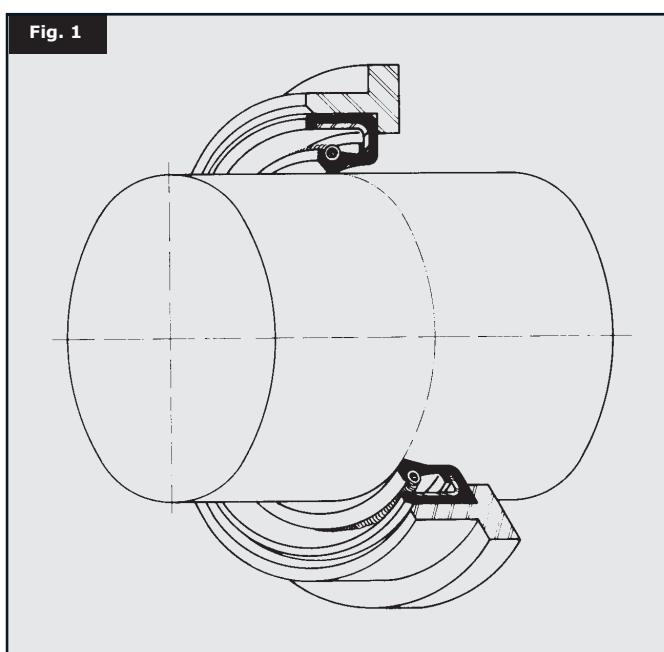
The oil seal consists essentially of a lip-shaped elastomeric membrane tight to a metal structure, which permits the lip to be located in the proper working position on application.

Its main function is to seal the oil, grease or other fluids that must be kept inside the machine.

The oil seal is always employed between two parts with relative movement, such as between a shaft that transmits movement and the housing that supports the bearing of this shaft.

This function has to be performed also when the machine is stopped and under the various temperature and environmental conditions for which the machine was designed.

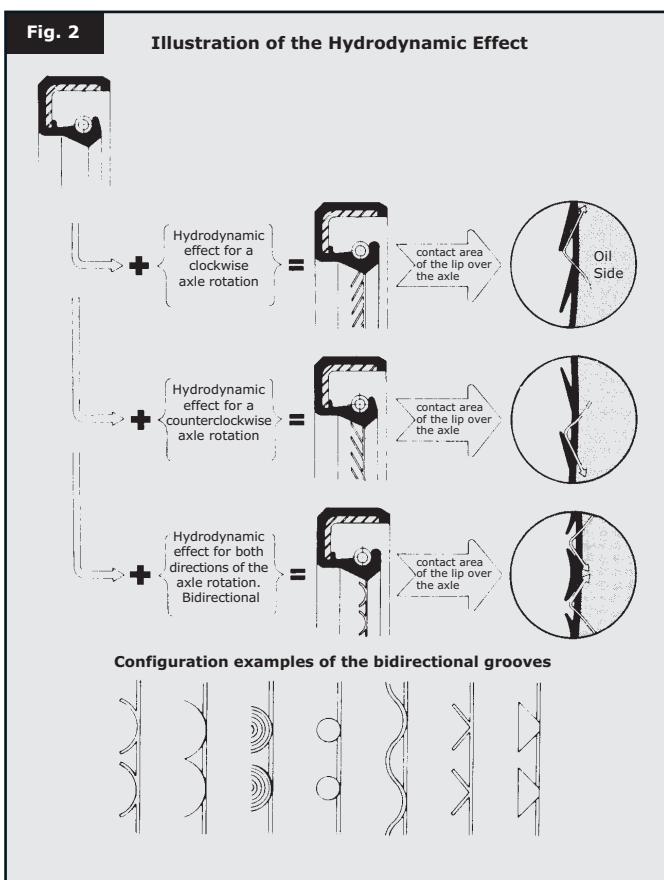
The sealing effect is obtained by means of the permanent contact between the edge of the seal lip and the shaft of the machine. To obtain complete protection against the outside environment, the outer structure of the seal and the housing must also have a sealing capability.



## SEALING LIP FEATURES

Using the conventional lip shown in figure 2, better seal performance can be obtained by adding molded ribs to the air angle so as to achieve the well-known hydrodynamic seal effect, that causes the flow-back of any oil which may have surpassed the seal edge, thus increasing the lip reliability and durability by assuring permanent lubrication of the contact area under the seal edge.

The hydrodynamic ribs can be of many geometric shapes, which are defined according to the conditions under which the seal is to be employed.



## ELASTOMERIC MATERIALS

As mentioned before, the sealing effect is obtained by means of the interference of the elastomeric lip on the shaft. The rotating shaft causes the appearance of a frictional force on the lip contact area, opposite to the direction of rotation.

The product of frictional force and angular velocity develops heat as well as vibration of the lip, which tends to cause the degradation of the elastomeric material and the wear of the lip seal.

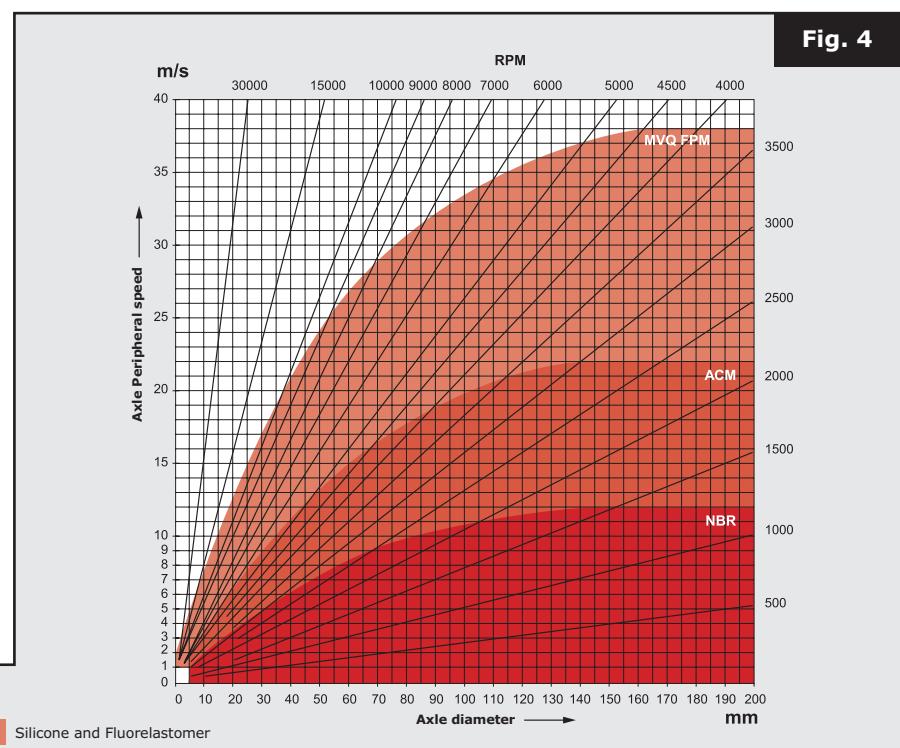
These effects can be avoided mainly by selecting the proper elastomeric material. It is extremely important that this selection is defined together with the seal manufacturer since there are many design parameters to be equally taken into consideration in order to extend the seal life.

Figure 3 presents the elastomers commonly used correlated to the different sealing fluids as well as working temperature conditions and suggest applications.

Elastomer code according to ISO 1629 and DIN 3761 Standards	Rubber Type	Minimum working temperature limit (°C)	Maximum working temperature limits (°C)						General use	Fig. 3
			Motor oils	Gear box oils	Hypoid oils	Automatic transmission oils (A.T.F.)	Grease	Gasoline + 2T Motor Oil	Alcohol + Additives	
NBR	Nitrilic	-35	110	110	110	120	90	100	100	Material usually employed in industrial machinery and equipment. Largely used in the automobile industry for general applications.
ACM	Polyacrylic	-15	130	120	120	130	-	-	-	Material largely used in motors and transmissions for the automobile industry.
MVQ	Silicone	-50	150	-	-	130	-	-	-	Material usually employed in high performance motors and in torque converters in automatic transmission systems.
FPM	Fluorelastomer	-30	150	150	150	150	-	125	125	Material employed in high-demand motors and transmissions.

Figure 4 shows a chart indicating the limits of circumferential velocity of the shaft for each material, provided that the lip is properly lubricated and the internal pressure is practically equal to the atmospheric one.

These considerations regarding the choice of the elastomeric material should be understood as general guidelines. We thus recommend that the new seal application should be discussed with the Sabó's Product Engineering.



## RECOMMENDATIONS FOR CORRECT APPLICATION

### Housing preparation (figure 5):

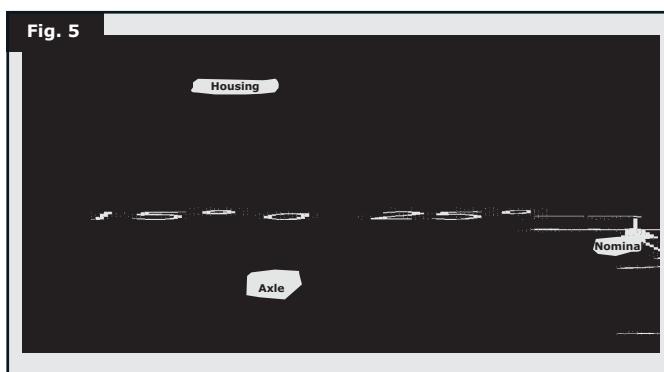
The recommendation of the housing preparation indicated below can be suggested for all types of oil seals.

The tolerance of the housing bore diameter DB is expected to follow the ISO H8 standard.

The seal is generally kept into the housing by interference between the bore diameter DB and outside diameter of the oil seal DOS. It is recommended to press-fit the oil seal into the housing aided by a hydraulic press. The recommended values of this interference and the tolerances of DB and the tolerances of DB and DOS according to Standard DIN 3760, are shown on figure 6.

The housing bore finishing might be obtained through a smooth machining operation in order to achieve a surface roughness of no more than  $R_a=25\mu$ . This precaution provides a good oil seal retention and avoids leakage through the oil seal outer diameter and the housing bore.

In order to prevent fitting difficulties, the housing has to be provided with a tapered chamfer with an inclination of  $5^\circ$  up to  $15^\circ$  and with a depth of no less than 0,8mm. This area has to be free of metal nicks and burrs, resulting from machining operation.



### Shaft preparation (figure 5):

The tolerance of the shaft diameter d should follow the standard DIN 3760 and ISO H11 recommendations.

**Tolerance of DF and DR and resulting interference  
Dimensions in millimeters**

**Fig. 6**

		<b>BR type Retainer</b>		<b>BA or B type Retainer</b>	
Nominal ø	Tol. D <sub>F</sub> (H8)	Tol. D <sub>R</sub>	Resulting Interference	Tol. D <sub>R</sub>	Resulting Interference
> 10 to 18	0 + 27	+ 0,30 + 0,15	+ 0,300 + 0,123	+ 0,20 + 0,10	+ 0,200 + 0,073
> 18 to 30	0 + 33	+ 0,30 + 0,15	+ 0,300 + 0,117	+ 0,20 + 0,10	+ 0,200 + 0,067
> 30 to 50	0 + 39	+ 0,30 + 0,15	+ 0,300 + 0,111	+ 0,20 + 0,10	+ 0,200 + 0,061
> 50 to 80	0 + 46	+ 0,35 + 0,20	+ 0,350 + 0,154	+ 0,23 + 0,13	+ 0,230 + 0,084
> 80 to 120	0 + 54	+ 0,35 + 0,20	+ 0,350 + 0,146	+ 0,25 + 0,15	+ 0,250 + 0,096
> 120 to 180	0 + 63	+ 0,45 + 0,25	+ 0,450 + 0,187	+ 0,28 + 0,18	+ 0,280 + 0,117
> 180 to 300	0 + 72	+ 0,45 + 0,25	+ 0,450 + 0,178	+ 0,30 + 0,20	+ 0,300 + 0,128

#### Usage examples:

— Calculation of  $D_F = \phi + \text{Tol. } D_F$  ..... Ex.  $D_{F\min} = 65 + 0.000 = 65.000$

$$D_{F\max} = 65 + 0.046 = 65.046$$

— Calculation of  $D_R = \phi + \text{Tol. } D_R$  ..... Ex.  $D_{R\min} = 65 + 0.200 = 65.200$

$$D_{R\max} = 65 + 0.350 = 65.350$$

#### Calculation of the Resulting Interference:

$$\text{Int.}_{\max} = D_{R\max} - D_{F\min} \dots \text{Ex. } 65.350 - 65.000 = 0.350 = \text{Int.}_{\max}$$

$$\text{Int.}_{\min} = D_{R\min} - D_{F\max} \dots \text{Ex. } 65.200 - 65.046 = 0.154 = \text{Int.}_{\min}$$

## RECOMMENDATIONS FOR CORRECT APPLICATION

### Housing preparation (figure 5):

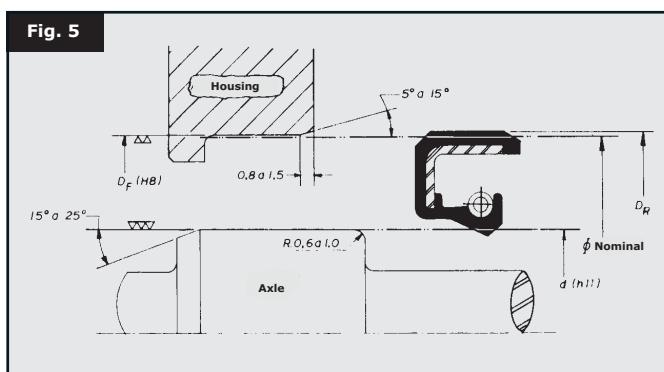
The recommendation of the housing preparation indicated below can be suggested for all types of oil seals.

The tolerance of the housing bore diameter DB is expected to follow the ISO H8 standard.

The seal is generally kept into the housing by interference between the bore diameter DB and outside diameter of the oil seal DOS. It is recommended to press-fit the oil seal into the housing aided by a hydraulic press. The recommended values of this interference and the tolerances of DB and the tolerances of DB and DOS according to Standard DIN 3760, are shown on figure 6.

The housing bore finishing might be obtained through a smooth machining operation in order to achieve a surface roughness of no more than  $R_a=25\mu$ . This precaution provides a good oil seal retention and avoids leakage through the oil seal outer diameter and the housing bore.

In order to prevent fitting difficulties, the housing has to be provided with a tapered chamfer with an inclination of  $5^\circ$  up to  $15^\circ$  and with a depth of no less than 0,8mm. This area has to be free of metal nicks and burrs, resulting from machining operation.



### Shaft preparation (figure 5):

The tolerance of the shaft diameter d should follow the standard DIN 3760 and ISO H11 recommendations.

**Tolerance of DF and DR and resulting interference Dimensions in millimeters**

**Fig. 6**

		BR type Retainer	BA or B type Retainer		
Nominal $\phi$	Tol. D_F (H8)	Tol. D_R	Resulting Interference	Tol. D_R	Resulting Interference
> 10 to 18	0 + 27	+ 0,30 + 0,15	+ 0,300 + 0,123	+ 0,20 + 0,10	+ 0,200 + 0,073
> 18 to 30	0 + 33	+ 0,30 + 0,15	+ 0,300 + 0,117	+ 0,20 + 0,10	+ 0,200 + 0,067
> 30 to 50	0 + 39	+ 0,30 + 0,15	+ 0,300 + 0,111	+ 0,20 + 0,10	+ 0,200 + 0,061
> 50 to 80	0 + 46	+ 0,35 + 0,20	+ 0,350 + 0,154	+ 0,23 + 0,13	+ 0,230 + 0,084
> 80 to 120	0 + 54	+ 0,35 + 0,20	+ 0,350 + 0,146	+ 0,25 + 0,15	+ 0,250 + 0,096
> 120 to 180	0 + 63	+ 0,45 + 0,25	+ 0,450 + 0,187	+ 0,28 + 0,18	+ 0,280 + 0,117
> 180 to 300	0 + 72	+ 0,45 + 0,25	+ 0,450 + 0,178	+ 0,30 + 0,20	+ 0,300 + 0,128

#### Usage examples:

— Calculation of  $D_F = \phi + \text{Tol. } D_F$  ..... Ex.  $D_{F\min} = 65 + 0.000 = 65.000$

$$D_{F\max} = 65 + 0.046 = 65.046$$

— Calculation of  $D_R = \phi + \text{Tol. } D_R$  ..... Ex.  $D_{R\min} = 65 + 0.200 = 65.200$

$$D_{R\max} = 65 + 0.350 = 65.350$$

#### Calculation of the Resulting Interference:

$$\text{Int.}_{\max} = D_{R\max} - D_{F\min} \dots \text{Ex. } 65.350 - 65.000 = 0.350 = \text{Int.}_{\max}$$

$$\text{Int.}_{\min} = D_{R\min} - D_{F\max} \dots \text{Ex. } 65.200 - 65.046 = 0.154 = \text{Int.}_{\min}$$

## RECOMMENDATIONS FOR THE SURFACE OF THE SHAFT

In order to guarantee durability and reliability of the seal, the surface of the shaft on which the lip runs should fit the following requirements:

- The finishing of the surface should be obtained by plunge grinding and should follow a roughness Ra of 0.2 to 0.5 $\mu$  or Rt of 0.80 $\mu$  to 1.60 $\mu$ . During this operation, axial movements of the grinding wheel should be avoided, since they cause machine leads on the shaft surface.
- This surface has also to be free from damages such as beats, leads grooves, material defects and rust.
- The shaft hardness in the seal operating area should be more than 28 Rockwell C.

To achieve good fitting and avoid the seal lip from being damaged, it is advisable to provide the shaft edge, which drives under the lip, with a chamfer whose inclination has to be kept within limits of 15° to 25°. As an alternative, it can be rounded-off with a radius of 0.6 to 1.0mm. Also these edges should be free of burrs.

It is also important that during fitting the seal lip avoids close contact with those parts of the shaft, which have key-ways, splined or roughly machined. If this situation cannot be avoided, a protective device with polished surface in its external diameter must be used.

### Housing Eccentricity

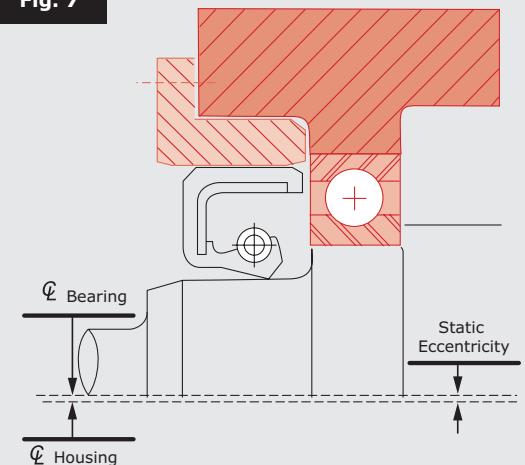
Because of the unavoidable machining differences of the housing and bearing bore, a certain eccentricity is to be expected. In other words, the center line of the oil seal housing does not coincide with the center line of the bearing (figure 7). The distance between these two center lines, which is called Static Eccentricity, must be maintained within the strict limits specified in Figure 8.

### Shaft Eccentricity

In the same way, as shown in figure 9, assembling all parts together, the shaft may also have a center line not coincident with the bearing one. The distance between these two center lines is known as Dynamic Eccentricity or Runout which should be kept within the values recommended in Figure 10.

If values are far above the recommended ones, there is a risk of the lip not to be able to stay in contact with the shaft, mainly in the case of high angular velocities.

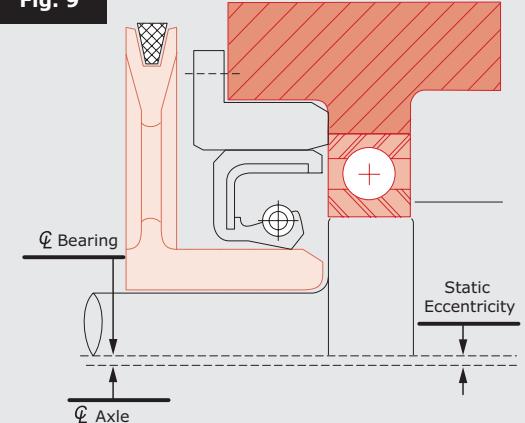
**Fig. 7**



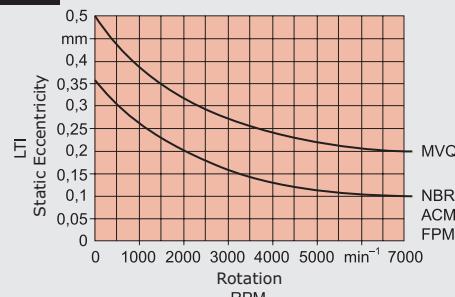
**Fig. 8**



**Fig. 9**



**Fig. 10**



## RECOMMENDATIONS FOR CORRECT INSTALLATION

### 1 – Storage precautions:

During storage the oil seals should be kept in their own Sabó packing. To store adequately in a clean and dry place, at temperatures not far from 10° to 40° C, free from contamination and unnecessary handling is recommended.

### 2 – Oil seal handling precautions:

On unpacking the oil seal for fitting, it is recommended to be extra careful to avoid unnecessary touching of the seal-lip, so as not to cause deformation and damage. No dust or other particles should be deposited on it.

### 3 – Pre-lubrication care:

To assure perfect fitting of the oil seal in the housing bore and also to provide initial lubrication of the seal edge when the aggregate makes the first operating revolutions, it is recommended to pre-lubricate the seal with a bit of application fluid.

### 4 – Press-fitting the oil seal in the housing

A mechanical or hydraulic press should be used to fit the oil seal in its seat using suitable installation devices to meet the following recommendations:

- A perfect pre-centering of the oil seal is fundamental, in such a way that it may be press-fitted in the proper position in the housing.
- The acting surface of the oil seal installation devices should be as close as possible to the outside diameter of the oil seal so as to avoid deformations upon operation.
- The fixture must not cause damage to the seal lip under any conditions.

Figure 11 shows some of the devices normally recommended.

### 5 – Fitting the oil seal on the operating shaft:

If it is impossible to chamfer or round-off the edge of the shaft, on which the oil seal is to be driven on, or if the seal must pass through parts of the shaft having grooves, splines or key-ways, it is recommended to protect the lip with a sleeve as shown on figure 12. Warning: the sleeve must have a slightly larger diameter than the shaft itself.

It is extremely important that the outer surface of the sleeve through which the seal lip is to be driven on is properly polished, perfectly clean and free from damage or sharp corners caused by shocks during handling.

### 6 – Precautions for replacing oil seals:

Whenever an aggregate is disassembled for any reason that implies in disassembling the oil seal or the operating shaft, it is recommended to replace the oil seal by a new one.

Whenever it is not possible to replace also the shaft, the seal edge of the new oil seal should not run in the former one.

The new oil seal should always be fitted displaced with respect to the previous one, observing that the shaft is in perfect condition, free from defects, solid deposits and rust. Warning: The shaft surface should not be polished.

Sometimes due to bad conditions of the housing bore, it is inevitable to use sealing cements on the outer portion of the oil seal so to provide better outside sealing. In such a case, care should be taken to prevent the sealing cements not to reach the seal lip or shaft because they can cause oil leakages.

Fig. 11

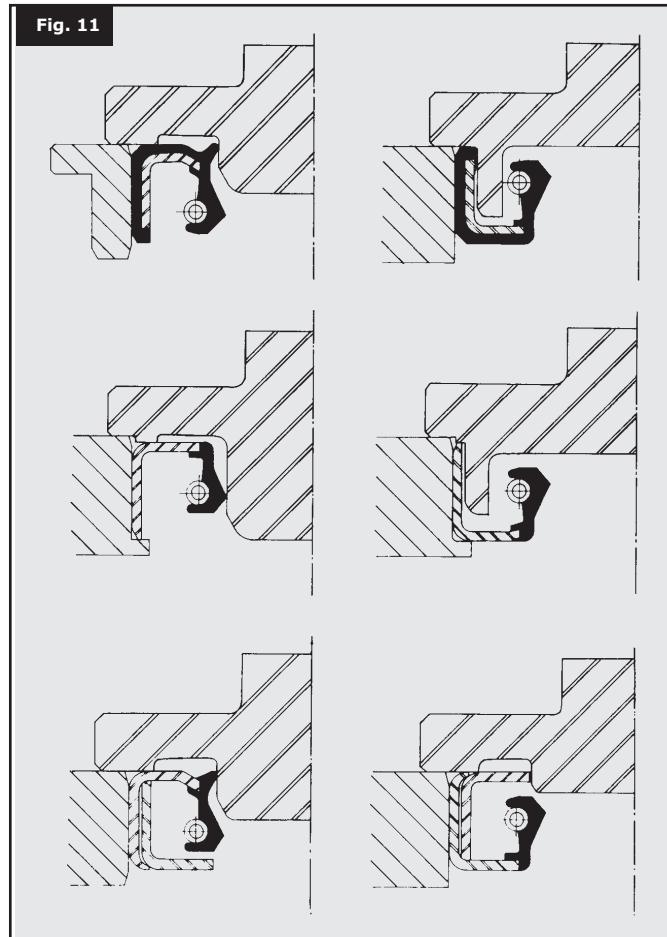
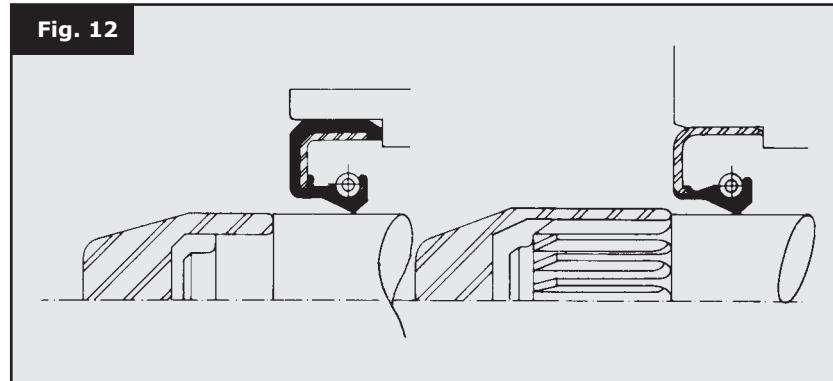


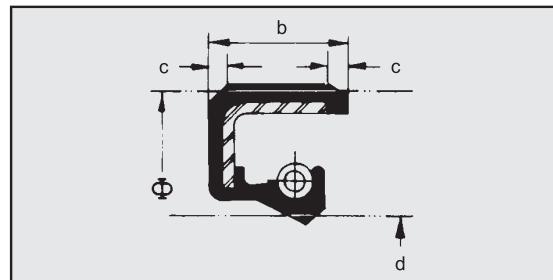
Fig. 12



## STANDARDIZATION OF OIL SEAL DIMENSIONS ACCORDING TO STANDARD DIN 3761

Figure 13 presents the oil seal sizes, in mm, recommended by Standard DIN 3761, classified by their nominal shaft diameter, housing bore diameter and width.

**Fig. 13**



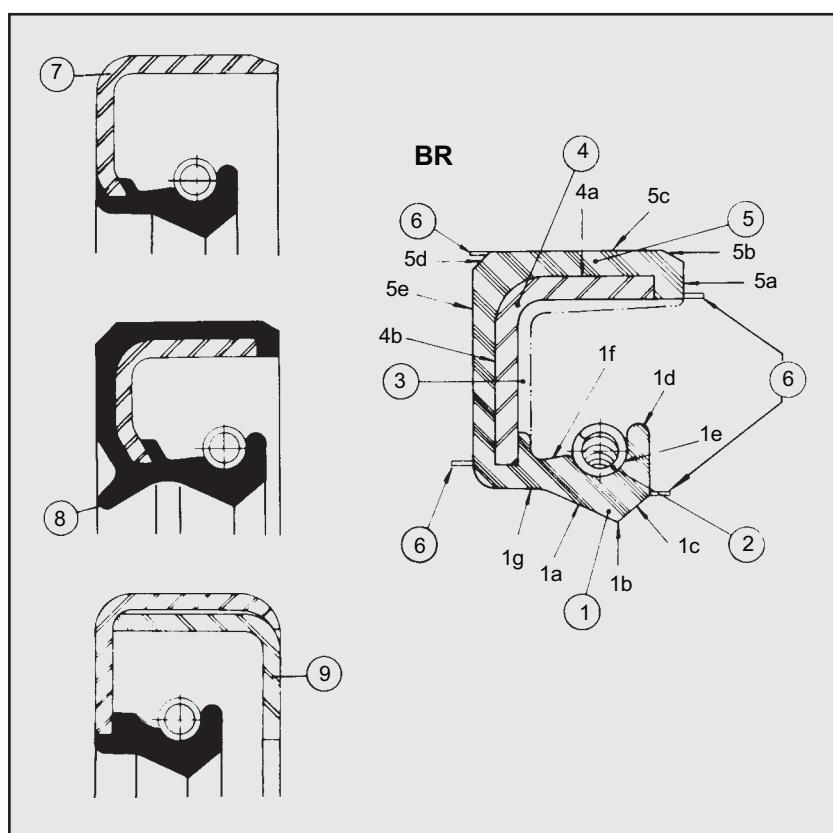
Diameter of d axle d	$\Phi$	b	c min.	Diameter of d axle d	$\Phi$	b	c min.	Diameter of d axle d	$\Phi$	b	c min.
6	16 22	7	0.3	30	40 42 47 52 62	7	0.4	70	90 100	10	0.5
7	22	7	0.3	32	45 47 52 47	7	0.4	72	95 100	10	0.5
8	22 24	7	0.3	35	50 52 62 47 50 52 62	7	0.4	75	95 100 78 100 100	10	0.5
9	22 24 26	7	0.3	36	55 62 52 62 52 55 62	7	0.4	80	110 110 100 110	10	0.5
10	22 24 26	7	0.3	40	55 62 72 55 62 72	7	0.4	85	110 120 120 110 120 120	12	0.8
11	22 26	7	0.3	42	60 62 72 60 62 65 72	8	0.4	90	120 120 125 120 125 120	12	0.8
12	22 24 28 30	7	0.3	45	62 72 80 68 72	8	0.4	95	130 130 140 130 140 140 150	12	0.8
14	24 28 30 35 26 30 32 35	7	0.3	48	62 72 65 68 72	8	0.4	100	150 160 150 160 170 170 180	12	0.8
15	30 32 35	7	0.3	50	65 68 72 80 68 72	8	0.4	105	170 170 180 180 190 190 200	12	0.8
16	28 30 32 35	7	0.3	52	68 72	8	0.4	110	190 190 200 200 210 210 220	12	0.8
17	28 30 32 35 40	7	0.3	55	70 72 80 85 70 72 80	8	0.4	115	200 200 210 210 220 220 230	12	0.8
18	30 32 35 40	7	0.3	56	72 80 85 72 80 85	8	0.4	120	230 240 250 260 270 	12	0.8
20	30 32 35 40 47	7	0.3	58	72 80 75 80 85 90	8	0.4	125	280 300 320 340 360 360 380	12	0.8
22	32 35 40 47	7	0.3	60	85 90 85 90 85 90	8	0.4	130	340 360 400 420 440 440 460	15	1
24	35 37 40 47	7	0.3	62	90 100 85 90 100	10	0.5	135	460 480 500 520 540	15	1
25	35 40 42 47 52	7	0.3	63	90 100 85 90 100	10	0.5	140	500 520 540	20	1
26	37 42 47	7	0.3	65	90 100 85 90 100	10	0.5	145	540 560 580	20	1
28	40 47 52	7	0.4	68	90 100	10	0.5	150	580 600 620 640 660	20	1

1) Tolerances allowed for  $\Phi$ , see fig. 6

## BASIC CONCEPT OF CONSTRUCTION

### 1. Lip or Head

- 1.a. Air Angle or Outside Lip Angle
- 1.b. Lip Edge
- 1.c. Oil Angle or Inside Lip Angle
- 1.d. Toe Face
- 1.e. Spring Retaining Lip
- 1.f. Lip Inner Area
- 1.g. Lip-flex Section



### 2. Garter Spring

### 3. Seal Inner are, rubber coating

### 4. Metal Case

- 4.a. Lift cylindrical area
- 4.b. Setting radial flange

### 5. Outside elastomeric coating

- 5.a. Border
- 5.b. Border chamfer
- 5.c. Outside diameter
- 5.d. Backside chamfer
- 5.e. Backside face

### 6. Molding Flash

### 7. Metallic outside face

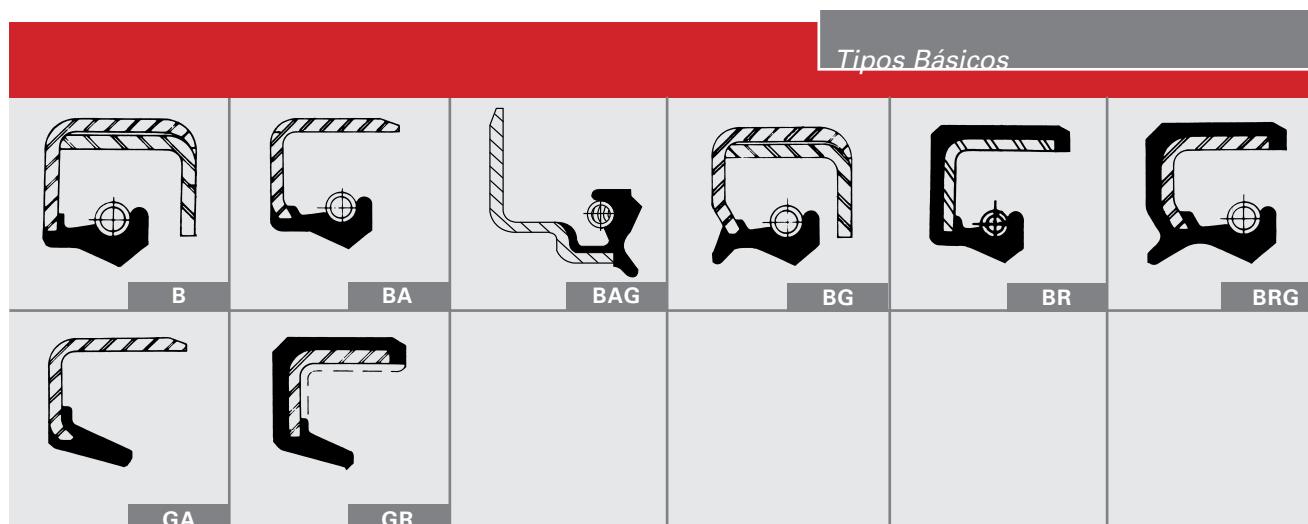
### 8. Dust Lip or Secondary Lip

### 9. Metallic inner side case



# **ANOTAÇÕES**

**ANOTACIONES**  
**REMARKS**

**LEGENDAS**

**BR** - Vedação principal de borracha com mola, recoberto externamente com borracha.

**BRG** - Vedação principal de borracha com mola, proteção contra poeira, recoberto externamente com borracha.

**BA** - Vedação principal de borracha com mola e diâmetro externo de metal.

**BAG** - Vedação principal de borracha com mola, proteção contra poeira e diâmetro externo de metal.

**B** - Vedação principal de borracha com mola, diâmetro externo de metal, com tampa.

**BG** - Vedação principal de borracha com mola, diâmetro externo de metal, proteção contra poeira, recoberto com borracha e tampa.

**GR** - Vedação principal de borracha, sem mola e diâmetro externo recoberto com borracha.

**GA** - Vedação principal de borracha, sem mola e diâmetro externo de metal.

**ESTRIAS DO LÁBIO (ORIENTAÇÃO)**

**L** = liso

**H** = horário

**AH** = anti-horário

**BI** = bidirecional

**RE** = rosca esquerda

**MATERIAL DO LÁBIO**

**NBR** = nitrílica

**ACM** = poliacrólica

**MVQ** = silicone

**PH** = velumóide

**CO** = couro

**NY** = nylon

**FPM** = flúor

**LEYENDAS**

**BR** - Retención principal de goma con resorte, recubierta externamente con goma.

**BRG** - Retención principal de goma con resorte, protección contra polvo, recubierta externamente con goma.

**BA** - Retención principal de goma con resorte y diámetro externo de metal.

**BAG** - Retención principal de goma con resorte, protección contra polvo y diámetro externo de metal.

**B** - Retención principal de goma con resorte, diámetro externo de metal, con tapa.

**BG** - Retención principal de goma con resorte, diámetro externo de metal, protección contra polvo y tapa.

**GR** - Retención principal de goma sin resorte y diámetro externo recubierto con goma.

**GA** - Retención principal de goma sin resorte y diámetro externo de metal.

**ESTRIAS DEL LABIO (ORIENTACIÓN)**

**L** = liso

**H** = horario

**AH** = antihorario

**BI** = bidireccional

**RE** = rosca izquierda

**MATERIAL DO LÁBIO**

**NBR** = nitrilico

**ACM** = poliacrílico

**MVQ** = silicona

**PH** = adamite

**CO** = cuero

**NY** = nylon

**FPM** = flúor

**LEGENDS**

**BR** - Primary lip in rubber, spring loaded, outside diameter with rubber coating.

**BRG** - Primary lip in rubber, spring loaded, protection against dust, outside diameter with rubber coating.

**BA** - Primary lip in rubber, spring loaded, outside diameter without rubber coating.

**BAG** - Primary lip in rubber, spring loaded, protection against dust, outside diameter without rubber coating.

**B** - Primary lip in rubber, spring loaded, outside diameter without rubber coating, with inner case.

**BG** - Primary lip in rubber, spring loaded, outside diameter without rubber coating, protection against dust, with inner case.

**GR** - Primary lip in rubber, non-spring loaded, outside diameter with rubber coating.

**GA** - Primary lip in rubber, non-spring loaded, outside diameter without rubber coating.

**HYDRODYNAMIC AIDS (DIRECTION OF SHAFT ROTATION)**

**L** = without helix

**H** = clock wise

**AH** = counter clock wire

**BI** = bi-directions

**RE** = thread to the left

**SEAL LIP MATERIAL**

**NBR** = nitrile

**ACM** = polyacrylic

**MVQ** = silicona

**PH** = velumoide

**CO** = leather

**NY** = nylon

**RMS** = fluor

## TIPOS BÁSICOS

TIPOS BASICOS

STANDARD SEAL DESIGNS

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
5,0	14,5	4,5	03254BR	BR	LI	NBR	40
6,0	10,0	2,5	02515GR	GR	LI	CR	40
6,0	16,0	6,5	02873BRG	BRG	LI	NBR	40
6,4	16,1	6,4	00807BA	BA	LI	NBR	40
6,4	19,1	6,4	01685BR	BR	LI	NBR	40
6,5	14,5	7,0	02306BRG	BRG	LI	NBR	40
6,8	22,0	7,0	02166BRG	BRG	LI	NBR	40
7,0	16,0	7,0	02358BA	BA	LI	NBR	40
7,7	14,7	5,0	07078BR	BR	LI	HNBR	40
7,8	13,8	3,6	02198GR	GR	LI	NBR	40
7,8	14,1	3,6	01984GA	GA	LI	NBR	40
7,8	14,6	4,8	00482GAF	GA	LI	FPM	40
7,9	16,0	6,0	07590BRP	BR	LI	ACM	40
8,0	14,0	3,0	02495BRF	BR	LI	FPM	40
8,0	14,0	3,0	02536BR	BR	LI	NBR	40
8,0	14,0	4,0	07465BRAF	BRA	LI	FPM	40
8,0	15,0	3,0	02491GR	GR	LI	NBR	40
8,0	15,0	5,5	02762BR	BR	LI	NBR	40
8,0	16,0	7,0	02013BAP	BA	H	ACM	40
8,0	17,5	8,0	00198BA	BA	LI	NBR	40
8,0	18,0	5,0	01423BR	BR	LI	NBR	40
8,0	18,0	5,0	02163BRG	BRG	LI	NBR	40
8,0	22,0	8,0	01587BR	BR	LI	NBR	40
8,4	16,0	6,5	03274BR	BR	***	***	40
8,5	16,0	6,5	00998BR	BR	H	NBR	40
9,4	21,4	5,0	02248GA	GA	LI	NBR	40
9,5	19,1	7,0	01853BR	BR	H	NBR	40
9,5	19,2	7,0	01093BR	BR	LI	NBR	40
9,5	25,4	9,5	00089B	B	LI	NBR	40
10,0	14,0	3,0	02135GA	GA	LI	NBR	40
10,0	15,0	3,0	03267GA	GA	LI	NBR	40
10,0	19,0	6,5	02171BR	BR	LI	NBR	40
10,0	21,0	5,0	03005BR	BR	AH	NBR	40
10,0	22,0	7,0	01672BR	BR	LI	NBR	40
10,0	22,0	7,0	01904BRP	BR	H	ACM	40
10,0	22,0	7,0	02160BR	BR	H	NBR	40
10,0	30,0	7,0	00764BA	BA	LI	NBR	40
10,3	16,0	4,0	02001GA	GA	LI	NBR	40
10,8	22,2	5,4	01067BR	BR	LI	NBR	40
11,0	17,0	4,0	01737BR	BR	LI	NBR	40
11,0	17,0	4,0	01737BRF	BR	LI	FPM	40
11,0	17,0	4,0	02523BRF	BR	LI	FPM	40

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retençao Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
11,0	17,0	4,0	01737BR	BR	LI	NBR	40
11,1	22,2	6,5	02474BRG	BRG	LI	NBR	40
11,1	25,4	6,0	01479BR	BR	LI	NBR	40
11,6	24,0	10,0	07408BRGP	BRG	LI	ACM	40
11,9	24,0	6,0	05548BRGF	BRG	H	FPM	40
12,0	18,0	3,0	02638GR	GR	LI	NBR	40
12,0	20,0	5,0	02689BAG	BAG	LI	NBR	40
12,0	21,0	4,0	03255BR	BR	LI	NBR	40
12,0	22,0	5,0	02535BRG	BRG	LI	NBR	40
12,0	22,0	5,0	03401BAG	BAG	LI	NBR	40
12,0	22,0	7,0	00289BA	BA	LI	NBR	40
12,0	28,1	7,0	01420BR	BR	LI	NBR	40
12,0	28,1	8,0	02792BAG	BAG	LI	NBR	40
12,0	32,0	7,0	01445BA	BA	LI	NBR	40
12,4	19,0	5,0	05148BRF	BR	BI	FPM	40
12,5	20,0	5,0	02360BRF	BR	BI	FPM	40
12,5	25,0	8,0	03250BRG	BRG	LI	NBR	40
12,6	21,4	5,0	02249GA	GA	LI	NBR	40
12,7	22,2	8,0	01559BR	BR	LI	NBR	40
12,7	22,2	8,0	02343BAP	BA	LI	ACM	40
12,7	25,3	9,5	01508B	B	LI	NBR	40
12,7	25,4	6,4	00981GA	GA	LI	NBR	40
12,7	25,4	6,4	01966BA	BA	BI	NBR	40
12,7	25,4	9,5	00129BR	BR	LI	NBR	40
12,7	28,5	9,5	00311B	B	LI	NBR	40
12,7	28,6	6,5	01957BA	BA	BI	NBR	40
12,7	30,0	8,0	01097BR	BR	LI	NBR	40
13,0	26,0	7,0	02373BRG	BRG	LI	NBR	40
13,0	26,0	9,0	01074BRG	BRG	LI	NBR	40
13,8	24,0	5,0	03389BRG	BRG	LI	NBR	40
14,0	20,0	3,5	02025BA	BA	LI	NBR	40
14,0	22,0	4,0	02569BRGP	BRG	LI	ACM	40
14,0	22,0	5,0	03252BRG	BRG	BI	NBR	40
14,0	23,9	6,0	01717GA	GA	LI	NBR	40
14,0	24,0	6,0	02162BRG	BRG	LI	NBR	40
14,0	24,0	7,0	01389BAG	BAG	LI	NBR	40
14,0	28,0	7,0	02308BRG	BRG	LI	NBR	40
14,0	32,0	10,0	01875BR	BR	LI	NBR	40
14,3	22,0	3,9	01977GR	GR	LI	NBR	40
14,3	24,0	7,0	01835BR	BR	LI	NBR	40
14,3	25,4	9,5	00716B	B	LI	NBR	40
14,3	28,5	6,4	00293BR	BR	LI	NBR	40

TIPOS BÁSICOS / TIPOS BASICOS / STANDARD SEAL DESIGN

Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.

Before specifying the use of a retainer, please check for availability • 0800 7712155

## TIPOS BÁSICOS

### TIPOS BASICOS

### STANDARD SEAL DESIGNS

Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
14,3	28,5	9,5	00541B	B	LI	NBR	40
14,3	39,6	6,3	02334BAG	BAG	LI	NBR	40
15,0	21,0	3,0	02589GR	GR	LI	NBR	40
15,0	21,0	4,0	02130BAG	BAG	LI	NBR	40
15,0	21,0	5,0	07397BRAGP	BRAG	LI	ACM	40
15,0	23,0	3,0	02639GR	GR	LI	NBR	40
15,0	24,0	7,0	00790BR	BR	LI	NBR	40
15,0	24,0	7,0	01929BAG	BAG	LI	NBR	40
15,0	24,0	7,0	01929BRG	BRG	LI	HNBR	40
15,0	24,0	7,4	01816BA	BA	AH	NBR	40
15,0	25,0	7,0	02309BRP	BR	AH	ACM	40
15,0	25,0	7,0	02454BRG	BRG	LI	NBR	40
15,0	26,0	6,0	02279BAG	BAG	LI	NBR	40
15,0	26,0	7,0	07518BRG	BRG	LI	NBR	40
15,0	28,0	7,0	00916BA	BA	LI	NBR	40
15,0	28,6	8,0	01076B	B	LI	NBR	40
15,0	29,6	4,0	03403BAG	BAG	LI	NBR	40
15,0	30,0	5,0	00515GA	GA	LI	NBR	40
15,0	30,0	6,0	01915BAGP	BAG	LI	ACM	40
15,0	30,0	7,0	01677BR	BR	LI	NBR	40
15,0	30,0	7,0	01846BAG	BAG	LI	NBR	40
15,0	30,0	8,0	00766BA	BA	LI	NBR	40
15,0	30,0	10,0	01348BR	BR	LI	NBR	40
15,0	32,0	7,0	01907BR	BR	LI	NBR	40
15,0	35,0	7,0	01058BR	BR	LI	NBR	40
15,0	35,0	7,0	01959BAG	BAG	LI	NBR	40
15,0	35,1	10,0	01051BR	BR	LI	NBR	40
15,9	22,2	4,3	02335BAG	BAG	LI	NBR	40
15,9	23,8	4,8	00119GA	GA	LI	NBR	40
15,9	25,4	4,5	00286BR	BR	LI	NBR	40
15,9	25,4	6,4	01175BA	BA	LI	NBR	40
15,9	28,5	7,0	01493BR	BR	LI	NBR	40
15,9	28,6	9,5	00156B	B	LI	NBR	40
15,9	30,0	6,0	01934BAG	BAG	H	NBR	40
15,9	30,3	4,5	01700GR	GR	LI	NBR	40
15,9	35,0	10,0	00375BA	BA	LI	NBR	40
16,0	22,0	3,0	02492GR	GR	LI	NBR	40
16,0	22,1	6,4	01576BAG	BAG	LI	NBR	40
16,0	22,8	4,8	07519BR	BR	LI	NBR	40
16,0	22,8	4,8	07551BR	BR	LI	NBR	40
16,0	24,0	6,0	02176BRG	BRG	LI	NBR	40
16,0	28,0	7,0	00980BA	BA	LI	NBR	40

Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
16,0	28,0	7,0	02310BRG	BRG	LI	NBR	40
16,0	30,0	6,4	01817BA	BA	AH	NBR	40
16,0	30,0	10,0	00795BR	BR	LI	NBR	40
16,0	32,0	7,0	00796BR	BR	LI	NBR	40
16,3	24,0	7,0	00726BR	BR	LI	NBR	40
17,0	25,0	3,0	02640GR	GR	LI	NBR	40
17,0	25,0	4,0	02161BR	BR	LI	NBR	40
17,0	25,0	4,0	02571BRG	BRG	LI	NBR	40
17,0	25,0	4,0	02669GA	GA	LI	NBR	40
17,0	27,0	5,0	03253BRG	BRG	LI	NBR	40
17,0	28,0	5,0	02701BRG	BRG	LI	NBR	40
17,0	28,0	6,0	01072BA	BA	LI	NBR	40
17,0	28,0	7,0	00508BA	BA	LI	NBR	40
17,0	28,0	7,0	00508BAG	BAG	LI	NBR	40
17,0	28,0	7,0	03012BA	BA	LI	NBR	40
17,0	28,0	7,0	05141BRAGP	BRAG	LI	NBR	40
17,0	28,1	5,0	02375BR	BR	LI	NBR	40
17,0	29,0	5,4	07409BRP	BR	AH	ACM	40
17,0	30,0	7,0	02730BRG	BRG	LI	NBR	40
17,0	31,2	7,5	01464BA	BA	LI	NBR	40
17,0	31,5	7,0	05660BRP	BR	LI	ACM	40
17,0	32,0	7,0	01725BR	BR	LI	NBR	40
17,0	32,0	7,0	02425BR	BR	LI	NBR	40
17,0	32,2	6,0	05711BRGP	BRG	H	ACM	40
17,0	34,0	7,0	01916BAGP	BAG	LI	ACM	40
17,0	35,0	7,0	00853BR	BR	LI	NBR	40
17,0	35,0	8,0	01511BR	BR	LI	NBR	40
17,0	35,0	10,0	00828BR	BR	LI	NBR	40
17,0	35,0	10,0	01415BRG	BRG	LI	NBR	40
17,0	35,3	7,0	01113BRG	BRG	LI	NBR	40
17,0	39,9	5,0	03402BAG	BAG	LI	NBR	40
17,0	40,0	8,5	01492B	B	LI	NBR	40
17,0	47,2	7	03226BRG	BRG	LI	NBR	40
17,5	28,3	7,0	01496BR	BR	LI	NBR	40
17,5	30,3	4,5	01871GR	GR	LI	NBR	40
17,8	35,0	9,5	00608B	B	LI	NBR	40
18,0	24,0	3,0	02510GA	GA	LI	NBR	40
18,0	24,0	4,0	02567GR	GR	LI	NBR	40
18,0	24,0	4,0	02698GR	GR	LI	NBR	40
18,0	27,0	8,5	07456GRG	GRG	***	NBR	40
18,0	30,0	6,4	07328BRGP	BRG	LI	ACM	40
18,0	30,0	6,4	07457BRG	BRG	LI	NBR	40

## TIPOS BÁSICOS

TIPOS BASICOS  
STANDARD SEAL DESIGNS

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material Iábio Material Labio Material	Página Pagina Page
18,0	30,0	7,0	00496BRG	BRG	LI	NBR	40
18,0	30,0	7,0	02329BRG	BRG	LI	NBR	40
18,0	32,0	4,5	03269BRG	BRG	***	NBR	40
18,0	35,0	10,0	01769BR	BR	LI	NBR	40
18,0	37,0	8,0	02164BRG	BRG	LI	NBR	40
18,0	40,0	9,0	01107BR	BR	LI	NBR	40
18,0	47,0	8,0	01400BR	BR	LI	NBR	40
18,2	30,0	6,0	02830BRG	BRG	LI	NBR	40
18,8	31,7	11,0	02203BAG	BAG	LI	NBR	40
18,9	30,0	5,3	05586BRGP	BRG	AH	ACM	40
19,0	25,4	3,2	00888GA	GA	LI	NBR	40
19,0	25,4	4,3	07888GRP	GR	LI	ACM	40
19,0	28,5	4,0	01868GA	GA	LI	NBR	40
19,0	28,5	6,4	00329BA	BA	LI	NBR	40
19,0	28,6	6,5	02131BAG	BAG	LI	NBR	40
19,0	28,7	4,7	01455BA	BA	LI	NBR	40
19,0	29,1	6,4	01909BR	BR	LI	NBR	40
19,0	30,0	6,2	05701BRG	BRG	LI	NBR	40
19,0	30,1	7,5	01527BA	BA	LI	NBR	40
19,0	31,6	7,7	02263BR	BR	LI	NBR	40
19,0	31,7	6,4	00569B	B	LI	NBR	40
19,0	31,7	6,4	00569BR	BR	LI	NBR	40
19,0	31,8	6,4	00821BR	BR	LI	NBR	40
19,0	31,8	8,0	00989BAG	BAG	LI	NBR	40
19,0	31,9	7,0	00798BA	BA	LI	NBR	40
19,0	33,3	7,9	03331BRAG	BRAG	H	HNBR	40
19,0	34,9	9,5	00959B	B	LI	NBR	40
19,0	35,0	7,0	00784BR	BR	LI	NBR	40
19,0	35,0	10,0	00159BR	BR	LI	NBR	40
19,0	35,0	10,3	01965BAP	BA	BI	ACM	40
19,0	36,1	8,5	01407BR	BR	LI	NBR	40
19,0	36,6	8,5	02722BR	BR	LI	NBR	40
19,0	38,1	10,0	00158B	B	LI	NBR	40
19,0	41,3	8,0	00714BA	BA	LI	NBR	40
19,0	41,3	11,0	01465BA	BA	LI	NBR	40
19,0	42,1	7,0	01235BR	BR	LI	NBR	40
19,3	29,1	6,4	01110BR	BR	LI	NBR	40
19,9	35,0	7,0	01894BRG	BRG	LI	NBR	40
20,0	26,0	4,0	02573GR	GR	LI	NBR	40
20,0	28,0	4,0	02641GR	GR	LI	NBR	40
20,0	30,0	7,0	00505BR	BR	LI	NBR	40
20,0	30,0	7,0	01935BAG	BAG	LI	NBR	40

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material Iábio Material Labio Material	Página Pagina Page
20,0	31,0	7,0	02285BA	BA	LI	NBR	40
20,0	31,0	7,0	03013BA	BA	LI	NBR	40
20,0	31,2	7,5	05142BRAGP	BRAG	LI	NBR	40
20,0	32,0	5,0	00767BA	BA	LI	NBR	40
20,0	32,0	6,0	00712BR	BR	LI	NBR	40
20,0	32,1	7,0	00953BR	BR	LI	NBR	40
20,0	34,0	7,0	02311BR	BR	AH	NBR	40
20,0	34,1	7,0	01718BR	BR	LI	NBR	40
20,0	35,0	4,5	01777GA	GA	LI	NBR	40
20,0	35,0	6,0	00715BA	BA	LI	NBR	40
20,0	35,0	7,0	02821BRG	BRG	LI	NBR	40
20,0	35,0	8,0	01386BRG	BRG	LI	NBR	40
20,0	35,0	10,0	00760BR	BR	LI	NBR	40
20,0	35,1	4,0	01404BR	BR	LI	NBR	40
20,0	35,1	5,8	01866GR	GR	LI	NBR	40
20,0	36,0	10,0	00918BR	BR	LI	NBR	40
20,0	38,1	6,4	02072BAP	BA	LI	ACM	40
20,0	38,1	10,0	01189BR	BR	LI	NBR	40
20,0	39,7	6,5	02433BRG	BRG	LI	NBR	40
20,0	40,0	4,0	01694BAP	BA	LI	ACM	40
20,0	40,0	6,0	01245BR	BR	LI	NBR	40
20,0	40,0	6,4	03126BRG	BRG	LI	NBR	40
20,0	40,0	7,0	00994BA	BA	LI	NBR	40
20,0	40,0	7,0	00994BRG	BRG	LI	NBR	40
20,0	40,0	7,0	02468BRG	BRG	LI	NBR	40
20,0	40,0	7,0	02566BRGF	BRG	LI	FPM	40
20,0	40,0	10,0	00360BA	BA	LI	NBR	40
20,0	40,3	10,0	00922BR	BR	LI	NBR	40
20,0	42,0	10,0	01746B	B	LI	NBR	40
20,0	47,1	10,0	00909BR	BR	LI	NBR	40
20,5	41,2	5,0	00963BAG	BAG	LI	NBR	40
20,6	38,1	7,0	02480BAGP	BAG	LI	ACM	40
20,7	34,9	11,9	01254BAG	BAG	LI	NBR	40
21,0	32,0	7,0	01883BAG	BAG	LI	NBR	40
21,0	32,0	7,0	01985BR	BR	LI	NBR	40
21,5	40,0	7,0	02371BAG	BRG	H	NBR	40
21,5	40,0	7,0	02418BRP	BR	H	ACM	40
21,8	25,0	1,9	02073GA	GA	LI	NBR	40

TIPOS BÁSICOS / TIPOS BASICOS / STANDARD SEAL DESIGN

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Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
21,8	35,0	7,0	02740BRGP	BRG	H	ACM	40
21,8	35,0	7,0	07540BRGP	BRG	H	ACM	40
21,8	36,5	6,4	01967BAS	BA	BI	MVQ	40
21,9	32,0	6,0	02729BA	BA	LI	NBR	40
21,9	40,0	8,0	07458BRGP	BRG	***	ACM	40
22,0	31,9	5,0	00769BA	BA	LI	NBR	40
22,0	32,0	5,5	01727BR	BR	LI	NBR	40
22,0	32,0	7,0	01554BRG	BRG	LI	NBR	40
22,0	35,0	6,7	00294BR	BR	LI	NBR	40
22,0	35,0	7,0	01716BR	BR	LI	NBR	40
22,0	35,0	7,0	02533BRGP	BRG	AH	ACM	40
22,0	35,0	7,0	02572BRG	BRG	LI	NBR	40
22,0	35,0	7,0	02579BRG	BRG	LI	NBR	40
22,0	35,0	7,0	05663BRGP	BRG	H	ACM	40
22,0	35,0	9,0	00955BAG	BAG	LI	NBR	40
22,0	35,0	10,0	00118BAG	BAG	LI	NBR	40
22,0	38,1	8,0	01112BR	BR	LI	NBR	40
22,0	40,0	7,0	00761BR	BR	LI	NBR	40
22,0	40,0	8,0	02009BP	B	H	ACM	40
22,0	41,3	8,0	01481BA	BA	AH	NBR	40
22,0	42,0	10,0	00815BR	BR	LI	NBR	40
22,0	42,0	10,0	01914BRP	BR	LI	ACM	40
22,0	45,0	8,0	05517BRGS	BRG	AH	MVQ	40
22,0	47,0	9,0	01779B	B	LI	NBR	40
22,1	35,0	8,0	02126GA	GA	LI	PU	40
22,2	28,6	3,2	02715GA	GA	LI	NBR	40
22,2	31,7	6,0	02357BA	BA	AH	NBR	40
22,2	31,8	6,0	02878BAG	BAG	AH	NBR	40
22,2	33,2	10,3	00150BA	BA	LI	NBR	40
22,2	34,9	8,0	00937BAG	BAG	LI	NBR	40
22,2	35,0	8,0	00937B	B	LI	NBR	40
22,2	35,0	8,0	01819BA	BA	AH	NBR	40
22,2	38,1	9,5	00100B	B	LI	NBR	40
22,2	50,8	11,1	02064BAG	BAG	LI	NBR	40
22,3	35,0	6,4	00572BR	BR	LI	NBR	40
22,8	40,0	8,0	07309BRAGP	BRAG	H	ACM	40
23,0	35,0	8,0	02372BAG	BAG	H	NBR	40
23,0	35,0	8,0	02837BAGF	BAG	H	FPM	40
23,0	36,0	6,0	08306BRP	BR	H	ACM	40
23,3	60,0	6,4	01613GA	GA	LI	NBR	40
23,8	34,5	7,0	02029BR	BR	LI	NBR	40
23,8	38,1	6,5	02465BAG	BAG	LI	NBR	40

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
23,8	38,1	7,0	01836B	B	LI	NBR	40
23,8	39,0	6,2	01867GR	GR	LI	NBR	40
24,0	35,0	6,0	02594BRF	BR	H	FPM	40
24,0	36,0	6,0	01666BR	BR	LI	NBR	40
24,0	36,0	7,0	03271BR	BR	***	***	40
24,0	37,0	7,0	01214BR	BR	LI	NBR	40
24,0	37,0	7,0	02210BRG	BRG	LI	NBR	40
24,0	38,0	6,0	07451BRP	BR	H	ACM	40
24,0	38,0	9,0	00829BR	BR	LI	NBR	40
24,0	40,1	10,0	01341BR	BR	LI	NBR	40
24,0	42,0	10,0	01507BR	BR	LI	NBR	40
24,0	47,0	7,0	00763BR	BR	LI	NBR	40
24,6	39,9	8,0	01712BAG	BAG	LI	NBR	40
25,0	32,0	4,0	02265GA	GA	LI	NBR	40
25,0	32,0	4,0	02588GR	GR	LI	NBR	40
25,0	32,0	4,0	02642GR	GR	LI	NBR	40
25,0	32,0	5,0	07967GA	GA	LI	NBR	40
25,0	35,0	5,0	02107GA	GA	LI	NBR	40
25,0	35,0	6,0	03025BRGF	BRG	H	FPM	40
25,0	35,0	7,0	01543BA	BA	LI	NBR	40
25,0	35,0	7,0	01543BR	BR	LI	NBR	40
25,0	35,0	7,0	05050BRG	BRG	H	NBR	40
25,0	35,0	7,5	02007BAGP	BAG	BI	ACM	40
25,0	35,0	8,0	02414BRG	BRG	H	NBR	40
25,0	36,0	7,0	01515BR	BR	LI	NBR	40
25,0	37,1	7,3	01577BR	BR	LI	NBR	40
25,0	37,9	7,0	01892BRG	BRG	LI	NBR	40
25,0	38,0	6,4	01019BR	BR	LI	NBR	40
25,0	38,0	8,0	01118B	B	LI	NBR	40
25,0	40,0	5,0	01295GR	GR	LI	NBR	40
25,0	40,0	7,0	02062BA	BA	LI	NBR	40
25,0	40,0	7,0	02570BRGF	BRG	LI	FPM	40
25,0	40,0	8,0	01556BR	BR	LI	NBR	40
25,0	40,0	8,0	02233BRG	BRG	BI	NBR	40
25,0	40,0	8,0	02712BRGP	BRG	H	ACM	40
25,0	40,0	9,0	02148BRG	BRG	LI	NBR	40
25,0	41,1	9,5	00191BR	BR	LI	NBR	40
25,0	42,0	6,0	01604BR	BR	LI	NBR	40
25,0	42,0	8,0	00925BA	BA	LI	NBR	40
25,0	42,0	8,0	05516BRGS	BRG	H	MVO	40

## TIPOS BÁSICOS

TIPOS BASICOS  
STANDARD SEAL DESIGNS

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
25,0	43,1	10,0	00506BR	BR	LI	NBR	40
25,0	44,9	5,0	00709BR	BR	LI	NBR	40
25,0	45,0	7,0	01397BA	BA	LI	NBR	40
25,0	47,0	7,0	02010BAG	BAG	LI	NBR	40
25,0	47,0	10,0	00266BR	BR	LI	NBR	40
25,0	47,0	10,0	02046BRG	BRG	LI	NBR	40
25,0	50,1	10,0	00499BR	BR	LI	NBR	40
25,0	52,0	8,0	02727BRG	BRG	LI	NBR	40
25,0	52,0	10,0	00463BR	BR	LI	NBR	40
25,0	62,0	5,0	01405GA	GA	LI	NBR	40
25,0	62,0	10,0	00770B	B	LI	NBR	40
25,4	34,9	6,4	00448BA	BA	LI	NBR	40
25,4	35,0	6,4	02032BA	BA	H	NBR	40
25,4	36,4	6,4	00283BR	BR	LI	NBR	40
25,4	38,0	6,5	02230B	B	LI	NBR	40
25,4	38,0	8,0	00768B	B	LI	NBR	40
25,4	38,0	9,5	01327BAG	BAG	LI	NBR	40
25,4	38,1	6,3	01356BAG	BAG	LI	NBR	40
25,4	38,1	10,0	00141BA	BA	LI	NBR	40
25,4	41,3	9,5	00934B	B	LI	NBR	40
25,4	44,3	8,3	00844B	B	LI	NBR	40
25,4	44,5	6,5	02527BAGP	BAG	BI	ACM	40
25,4	44,6	5,0	01156GR	GR	LI	NBR	40
25,4	44,6	6,4	01009BR	BR	LI	NBR	40
25,4	46,6	9,5	00145B	B	LI	NBR	40
25,4	47,6	11,1	01302B	B	LI	NBR	40
25,4	50,7	10,2	01393BA	BA	LI	NBR	40
26,0	31,0	3,0	01830GA	GA	LI	NBR	40
26,0	35,0	7,0	02568BRG	BRG	LI	NBR	40
26,0	37,0	7,0	01045BRG	BRG	LI	NBR	40
26,0	40,0	5,0	01778GR	GR	LI	NBR	40
26,0	40,0	8,0	02412BRG	BRG	H	NBR	40
26,0	42,0	8,0	02525BRAGF	BRAG	H	FPM	40
26,0	42,0	10,0	01151BRG	BRG	LI	NBR	40
26,0	43,0	10,0	00785BA	BA	LI	NBR	40
26,0	45,0	10,0	01860BA	BA	LI	NBR	40
26,3	33,3	3,2	01683GA	GA	LI	NBR	40
26,8	30,0	1,9	01785GA	GA	LI	NBR	40
27,0	34,0	3,0	02691GA	GA	LI	NBR	40
27,0	37,0	7,0	05266BRAGF	BRAG	H	FPM	40
27,0	38,1	6,4	00285BA	BA	LI	NBR	40
27,0	38,1	6,4	01993BR	BR	AH	NBR	40

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
27,0	40,0	7,0	01751BRG	BRG	LI	NBR	40
27,0	42,0	8,1	05269BRAGF	BRAG	H	FPM	40
27,0	42,9	7,1	01625BR	BR	LI	NBR	40
27,0	47,0	7,0	05592BRGF	BRG	H	FPM	40
28,0	34,9	5,0	00713GA	GA	LI	NBR	40
28,0	38,0	6,5	01886GR	GR	LI	NBR	40
28,0	40,0	5,0	02106GA	GA	LI	NBR	40
28,0	40,0	7,0	01495BR	BR	LI	NBR	40
28,0	40,0	7,0	01495BRF	BR	LI	FPM	40
28,0	40,0	8,0	02413BRG	BRG	H	NBR	40
28,0	40,0	8,0	02519BRG	BRG	LI	NBR	40
28,0	41,0	9,5	05682BAF	BA	H	FPM	40
28,0	42,0	7,0	01580B	B	LI	NBR	40
28,0	42,0	7,0	02145BRG	BRG	LI	NBR	40
28,0	47,0	10,0	00262B	B	LI	NBR	40
28,0	47,0	10,0	00262BA	BA	LI	NBR	40
28,0	50,0	12,0	01020B	B	LI	NBR	40
28,0	52,1	10,0	00503BR	BR	LI	NBR	40
28,0	52,1	10,0	05030BR	BR	LI	NBR	40
28,2	38,0	6,0	02549BRP	BR	LI	ACM	40
28,2	43,0	9,1	00607B	B	LI	NBR	40
28,4	45,0	8,5	01188BR	BR	LI	NBR	40
28,5	36,5	7,0	00122GA	GA	LI	NBR	40
28,5	38,0	6,0	02828BR	BR	LI	NBR	40
28,5	50,7	10,0	00771BA	BA	LI	NBR	40
28,6	34,9	3,2	01539GA	GA	LI	NBR	40
28,6	38,0	7,0	01022BR	BR	LI	NBR	40
28,6	38,1	6,0	01299BR	BR	LI	NBR	40
28,6	38,1	6,5	01964BA	BA	H	NBR	40
28,6	39,7	6,4	00581BR	BR	LI	NBR	40
28,6	39,7	9,5	00054BR	BR	LI	NBR	40
28,6	39,7	9,5	02654BR	BR	LI	NBR	40
28,6	39,8	4,7	00117GR	GR	LI	NBR	40
28,6	39,8	6,4	01998BR	BR	LI	NBR	40
28,6	39,8	7,0	00932BR	BR	LI	NBR	40
28,6	40,2	5,0	02337GA	GA	LI	NBR	40
28,6	41,2	7,0	02731BAGF	BAG	LI	FPM	40
28,6	41,3	6,5	02355BA	BA	H	NBR	40
28,6	41,3	6,5	02877BAG	BAG	H	NBR	40

TIPOS BÁSICOS / TIPOS BASICOS / STANDARD SEAL DESIGN

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## TIPOS BÁSICOS

TIPOS BASICOS  
STANDARD SEAL DESIGNS

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
28,6	41,3	9,4	01962BA	BA	AH	NBR	40
28,6	43,0	9,5	01661BAG	BAG	LI	NBR	40
28,6	44,5	11,0	00634BAG	BAG	LI	NBR	40
28,6	46,6	11,3	00056B	B	LI	NBR	40
28,6	50,3	9,5	00950B	B	LI	NBR	40
28,6	52,3	9,5	00961B	B	LI	NBR	40
28,6	57,2	9,5	01635BR	BR	LI	NBR	40
28,7	31,8	3,1	02361GA	GA	LI	NBR	40
28,7	40,0	7,0	02140BAP	BA	H	ACM	40
29,0	50,0	10,0	02244B	B	AH	NBR	40
29,4	42,8	8,0	02153BRG	BRG	LI	NBR	40
29,4	46,5	10,0	00127B	B	LI	NBR	40
29,9	45,0	7,0	01833BA	BA	H	NBR	40
29,9	52,0	8,0	01895BRG	BRG	LI	NBR	40
29,9	58,1	8,0	02407BA	BA	BI	NBR	40
30,0	37,0	3,0	02788GA	GA	LI	NBR	40
30,0	37,0	4,0	02643GR	GR	LI	NBR	40
30,0	37,1	4,0	02096BA	BA	LI	NBR	40
30,0	40,0	7,0	01535BR	BR	LI	NBR	40
30,0	40,0	7,0	01903BRP	BR	H	ACM	40
30,0	40,0	7,0	05515BRS	BR	LI	MVQ	40
30,0	40,0	7,0	05531BRGS	BRG	H	MVQ	40
30,0	40,0	8,0	00810BA	BA	LI	NBR	40
30,0	42,0	6,0	05117BRG	BRG	BI	NBR	40
30,0	42,0	7,0	00847BAG	BAG	LI	NBR	40
30,0	42,0	7,0	02539BRGP	BRG	H	ACM	40
30,0	42,0	7,0	05093BRAGF	BRAG	H	FPM	40
30,0	42,0	8,0	05507BRS	BR	***	MVQ	40
30,0	42,0	10,0	02234BRG	BRG	LI	NBR	40
30,0	42,1	8,0	01667BR	BR	LI	NBR	40
30,0	43,0	8,0	05074BRAGF	BRAG	H	FPM	40
30,0	43,0	9,5	00813BA	BA	LI	NBR	40
30,0	43,0	9,5	00813BAG	BAG	LI	NBR	40
30,0	43,6	7,0	07022BRGP	BRG	H	ACM	40
30,0	44,0	7,0	05530BRGP	BRG	H	ACM	40
30,0	45,0	12,0	00832BR	BR	LI	NBR	40
30,0	46,4	10,0	01831BA	BA	LI	NBR	40
30,0	47,0	6,0	01695BR	BR	LI	NBR	40
30,0	47,0	6,0	02593BR	BR	AH	NBR	40
30,0	47,0	7,0	02376BRG	BRG	AH	NBR	40
30,0	47,0	7,0	02678BRGS	BRG	H	MVQ	40
30,0	47,0	7,0	05202BRAGP	BRAG	H	ACM	40

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
30,0	47,0	10,0	00131BR	BR	LI	NBR	40
30,0	47,0	10,0	02930BRGP	BRG	BI	ACM	40
30,0	50,0	7,0	02817BRAGF	BRAG	H	FPM	40
30,0	50,0	10,0	00358BR	BR	LI	NBR	40
30,0	50,0	11,0	00911BRG	BRG	LI	NBR	40
30,0	50,1	12,0	00484BA	BA	LI	NBR	40
30,0	50,8	11,0	00701B	B	LI	NBR	40
30,0	52,0	7,0	02006BAG	BAG	H	NBR	40
30,0	52,0	7,0	05073BRAGF	BRAG	H	FPM	40
30,0	52,0	7,0	05196BRAGP	BRAG	H	ACM	40
30,0	52,0	8,0	00952BR	BR	LI	NBR	40
30,0	52,0	8,0	02813BRG	BRG	LI	NBR	40
30,0	52,0	9,0	01743BS	B	LI	MVQ	40
30,0	52,0	9,0	02401B	B	LI	NBR	40
30,0	52,0	10,0	00949BR	BR	LI	NBR	40
30,0	52,0	12,0	00824B	B	LI	NBR	40
30,0	52,0	12,0	01952BA	BA	AH	NBR	40
30,0	52,2	7,0	02831BAGP	BAG	H	ACM	40
30,0	55,0	12,0	00772BA	BA	LI	NBR	40
30,0	56,0	12,0	00817BR	BR	LI	NBR	40
30,0	58,1	11,0	07299BA	BA	AH	NBR	40
30,0	62,0	10,1	01273BA	BA	LI	NBR	40
30,0	72,0	9,5	01182BR	BR	LI	NBR	40
30,2	47,0	8,0	00455BA	BA	LI	NBR	40
30,2	62,0	12,0	01063BA	BA	LI	NBR	40
30,3	39,7	6,4	01922BR	BR	H	NBR	40
30,3	39,7	6,4	01992BR	BR	H	NBR	40
31,0	41,0	9,5	00519BA	BA	LI	NBR	40
31,0	47,0	7,0	00762BR	BR	LI	NBR	40
31,0	50,0	8,0	02317BRGF	BRG	H	FPM	40
31,7	42,8	7,9	01630BAG	BAG	LI	NBR	40
31,7	44,5	5,0	00114GR	GR	LI	NBR	40
31,7	44,5	7,0	01843BA	BA	H	NBR	40
31,7	44,5	8,0	00343BR	BR	LI	NBR	40
31,7	44,5	9,5	01154B	B	LI	NBR	40
31,7	50,3	11,1	01698B	B	LI	NBR	40
31,7	50,7	11,0	00028B	B	LI	NBR	40
31,7	50,8	9,5	00774B	B	LI	NBR	40
31,7	50,8	11,1	02063BAG	BAG	LI	NBR	40
31,7	51,0	5,0	01703GR	GR	LI	NBR	40
31,7	52,3	9,5	01377B	B	LI	NBR	40

## TIPOS BÁSICOS

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STANDARD SEAL DESIGNS

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
31,7	54,0	6,5	02052BAGP	BAG	LI	ACM	40
31,8	42,8	9,5	00017B	B	LI	NBR	40
31,8	44,5	6,5	01149BA	BA	H	NBR	40
31,8	45,0	3,6	03129GR	GR	LI	NBR	40
31,9	44,0	9,0	01370BA	BA	LI	NBR	40
32,0	42,0	7,0	01310BAG	BAG	LI	NBR	40
32,0	42,0	7,8/8,0	05159BRAGF	BRAG	H	FPM	40
32,0	43,0	5,0	02144GR	GR	LI	NBR	40
32,0	44,0	6,0	05580BRGF	BRG	H	FPM	40
32,0	44,3	9,0	00170BA	BA	LI	NBR	40
32,0	45,0	6,0	01726BR	BR	LI	NBR	40
32,0	45,0	6,5	02987GR	GR	LI	NBR	40
32,0	45,0	7,0	00495BA	BA	LI	NBR	40
32,0	45,0	7,0	02397BRG	BRG	AH	NBR	40
32,0	45,0	7,0	02984BRG	BRG	LI	NBR	40
32,0	47,0	10,0	01942BRGP	BRG	H	ACM	40
32,0	47,0	10,0	02142BRGF	BRG	BI	FPM	40
32,0	47,0	10,0	02842BRGF	BRG	H	FPM	40
32,0	47,0	10,0	02843BRGF	BRG	AH	FPM	40
32,0	47,0	10,0	02950BRGF	BRG	BI	FPM	40
32,0	47,0	10,0	05102BRAGP	BRAG	H	ACM	40
32,0	47,5	6,4	01563BA	BA	LI	NBR	40
32,0	48,0	8,0	05529BRGP	BRG	H	ACM	40
32,0	50,0	8,0	00839BR	BR	LI	NBR	40
32,0	51,9	12,0	01353BRG	BRG	LI	NBR	40
32,0	52,0	7,0	02699BRG	BRG	LI	NBR	40
32,0	52,0	9,0	01744B	B	LI	NBR	40
32,0	52,1	10,0	00801BR	BR	LI	NBR	40
32,0	57,1	9,5	00477BA	BA	LI	NBR	40
32,0	65,0	13,0	02184BAGP	BAG	AH	ACM	40
32,0	72,0	10,0	02270B	B	BI	NBR	40
33,0	44,0	8,0	07687BAG	BAG	LI	NBR	40
33,0	45,0	7,0	02012BRF	BR	LI	FPM	40
33,0	50,0	6,0	01603BRG	BRG	H	NBR	40
33,0	50,0	8,0	01839BA	BA	H	NBR	40
33,0	51,9	12,0	01849BAG	BAG	BI	NBR	40
33,0	52,0	6,0	01589BR	BR	LI	NBR	40
33,3	46,4	9,5	00322BA	BA	LI	NBR	40
33,3	69,4	7,9	01040BA	BA	LI	NBR	40
34,0	48,0	7,0	05307BRGP	BRG	H	ACM	40
34,0	52,0	7,0	07364BRAGP	BRAG	H	ACM	40
34,0	52,0	7,5	01509BR	BR	LI	NBR	40

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
34,0	62,1	10,0	01157BR	BR	LI	NBR	40
34,0	63,0	12,0	03251BRG	BRG	LI	NBR	40
34,0	72,0	10	01999BRG	BRG	H	NBR	40
34,5	48,1	8,8	01048BR	BR	LI	NBR	40
34,9	50,8	8,3	02221BA	BA	LI	NBR	40
34,9	50,9	8,3	02102BA	BA	H	NBR	40
34,9	52,0	7,0	02575BRAGF	BRAG	BI	FPM	40
34,9	52,3	9,5	01395B	B	LI	NBR	40
34,9	53,5	6,5	02315GA	GA	LI	NBR	40
34,9	55,9	12,5	01844BAG	BAG	AH	NBR	40
34,9	63,0	13,0	01343BAG	BAG	H	NBR	40
35,0	42,0	4,0	02095GA	GA	LI	NBR	40
35,0	44,5	7,0	01502BA	BA	LI	NBR	40
35,0	45,0	7,0	00822BA	BA	LI	NBR	40
35,0	46,5	4,8	01152GR	GR	LI	NBR	40
35,0	46,5	6,4	01526BRG	BRG	LI	NBR	40
35,0	46,5	7,0	03286BRAGP	BRAG	LI	ACM	40
35,0	47,0	7,0	00485BA	BA	LI	NBR	40
35,0	47,0	7,0	02962BRGF	BRG	BI	FPM	40
35,0	47,0	7,0	05508BRS	BR	H	MVQ	40
35,0	47,0	7,0	05658BRS	BR	H	MVQ	40
35,0	47,1	9,0	00969BR	BR	LI	NBR	40
35,0	47,1	10,0	00520BR	BR	LI	NBR	40
35,0	47,6	9,5	01041B	B	LI	NBR	40
35,0	48,0	7,0	02178BRGS	BRG	H	MVQ	40
35,0	50,0	7,0	05003BRAGS	BRAG	H	MVQ	40
35,0	50,0	8,0	05253BRGF	BRG	H	FPM	40
35,0	50,0	8,0	00962BR	BR	H	NBR	40
35,0	50,0	8,0	00962BRGP	BRG	H	ACM	40
35,0	50,0	8,0	02456BRGS	BRG	H	MVQ	40
35,0	50,0	8,0	05103BRAGP	BRAG	H	ACM	40
35,0	50,0	8,0	05511BRGF	BRG	BI	FPM	40
35,0	50,0	10,0	00789BA	BA	LI	NBR	40
35,0	50,0	10,0	00789BR	BR	LI	NBR	40
35,0	50,0	10,0	05313BRGS	BRG	***	***	40
35,0	52,0	8	02649BRAGP	BRAG	H	ACM	40
35,0	52,0	12,0	00912BRG	BRG	LI	NBR	40
35,0	52,1	10,0	01742BR	BR	LI	NBR	40
35,0	52,3	9,5	00879BR	BR	LI	NBR	40
35,0	53,3	8	02648BRAGP	BRAG	AH	ACM	40

TIPOS BÁSICOS / TIPOS BASICOS / STANDARD SEAL DESIGN

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## TIPOS BÁSICOS

TIPOS BASICOS

STANDARD SEAL DESIGNS

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Lábio Material	Página Pagina Page
35,0	53,9	9,5	00694B	B	LI	NBR	40
35,0	54,0	11,0	00214BR	BR	LI	NBR	40
35,0	54,9	11,0	01371BAG	BAG	LI	NBR	40
35,0	55,0	8,0	01980BR	BR	LI	NBR	40
35,0	55,0	8,0	07695BAG	BAG	BI	NBR	40
35,0	55,5	6,4	00284BR	BR	LI	NBR	40
35,0	56,0	10,0	02087BAG	BAG	BI	NBR	40
35,0	56,0	10,0	02224BR	BR	AH	NBR	40
35,0	56,0	10,0	07399BRP	BR	AH	ACM	40
35,0	56,1	12,0	00492BA	BA	LI	NBR	40
35,0	57,9	6,4	00258GA	GA	LI	NBR	40
35,0	58,0	10,0	01551BR	BR	LI	NBR	40
35,0	58,0	10,0	01905BR	BR	BI	NBR	40
35,0	60,3	9,5	02304BRG	BRG	LI	NBR	40
35,0	60,3	12,7	00009BR	BR	LI	NBR	40
35,0	61,8	7,5	00026GA	GA	LI	NBR	40
35,0	62,0	9,5	00800BA	BA	LI	NBR	40
35,0	62,0	10,0	01949BR	BR	AH	NBR	40
35,0	62,0	12,0	00136BA	BA	LI	NBR	40
35,0	62,0	12,0	02091BAG	BAG	BI	NBR	40
35,0	63,1	14,0	02303BRG	BRG	LI	NBR	40
35,0	63,5	12,7	00033B	B	LI	NBR	40
35,0	72,0	10,0	01366B	B	LI	NBR	40
35,0	80,0	6,0	02151BA	BA	LI	NBR	40
35,0	80,0	12,0	01954BR	BR	H	NBR	40
35,0	82,9	10,0	02732BRG	BRG	BI	NBR	40
35,5	58,2	13,0	01004BAG	BAG	BI	NBR	40
36,0	52,0	10,0	07867BRGP	BRG	AH	ACM	40
36,0	54,0	6,5	03272BAGS	BAG	***	***	40
36,0	54,0	7,0	00797BA	BA	LI	NBR	40
36,0	54,0	7,0	00797BR	BR	LI	NBR	40
36,0	54,0	7,0	02099BA	BA	H	NBR	40
36,0	54,0	7,0	07598BRAGF	BRAG	H	FPM	40
36,0	54,0	7,5	01421BR	BR	LI	NBR	40
36,0	54,0	7,5	01434BAS	BA	LI	MVQ	40
36,0	54,0	8/11	01483BA	BA	LI	NBR	40
36,0	56,0	10,0	00615BR	BR	LI	NBR	40
36,0	60,0	9,5	01814BRG	BRG	BI	NBR	40
36,5	57,1	12,7	00218B	B	LI	NBR	40
36,6	41,8	3,0	01882GA	GA	LI	NBR	40
37,0	47,0	10,2	05363BRG	BR	H	FPM	40
37,0	50,0	10,0	01608BR	BR	LI	NBR	40

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Lábio Material	Página Pagina Page
38,0	43,0	3,0	02444GA	GA	LI	NBR	40
38,0	47,6	6,5	02505BA	BA	LI	NBR	40
38,0	50,0	7,0	00486BA	BA	LI	NBR	40
38,0	52,0	10,0	00479BR	BR	LI	NBR	40
38,0	52,0	10,0	00479BRG	BRG	LI	NBR	40
38,0	52,3	6,2	01432GA	GA	LI	NBR	40
38,0	52,3	7,0	02506BR	BR	LI	NBR	40
38,0	53,1	8,5	01786BRG	BRG	LI	NBR	40
38,0	54,0	10,0	02051BR	BR	LI	NBR	40
38,0	57,0	7,0	01657BA	BA	LI	NBR	40
38,0	58,5	7,0	01832BR	BR	BI	NBR	40
38,0	62,0	7,0	02128BA	BA	LI	NBR	40
38,0	70,0	12,7	01318B	B	LI	NBR	40
38,0	74,0	11,0	01710BAG	BAG	LI	NBR	40
38,0	74,0	11,0	02289BAG	BAG	H	NBR	40
38,1	47,6	6,4	01536BA	BA	LI	NBR	40
38,1	47,6	7,0	02385BA	BA	H	NBR	40
38,1	47,6	7,0	07303BA	BA	H	NBR	40
38,1	50,1	7,0	01355BR	BR	LI	NBR	40
38,1	50,3	11,1	01284B	B	LI	NBR	40
38,1	50,4	11,0	01803BAG	BAG	LI	NBR	40
38,1	50,8	5,5	00470GA	GA	LI	NBR	40
38,1	50,8	9,5	01659BA	BA	LI	NBR	40
38,1	54,1	11,0	00203BR	BR	LI	NBR	40
38,1	55,6	6,4	01396BA	BA	LI	NBR	40
38,1	60,3	12,7	00049B	B	LI	NBR	40
38,1	60,3	12,7	00049BAG	BAG	AH	NBR	40
38,1	60,4	12,7	01854BRG	BRG	H	NBR	40
38,1	63,5	12,7	00019BR	BR	LI	NBR	40
38,2	60,4	12,7	01877BAG	BAG	AH	NBR	40
38,2	63,5	11,1	00995BA	BA	BI	NBR	40
39,1	62,2	6,4	00373GA	GA	LI	NBR	40
39,4	62,0	14,0	00066BAG	BAG	AH	NBR	40
39,4	63,6	12,7	02038BRG	BRG	BI	NBR	40
39,4	63,6	12,5	02438BRG	BRG	AH	NBR	40
39,7	57,1	6,4	01869GA	GA	LI	NBR	40
39,7	61,2	12,7	00016B	B	LI	NBR	40
39,7	62,0	12,0	00166BR	BR	LI	NBR	40
40,0	49,5	6,5	05681BAGF	BAG	H	FPM	40
40,0	50,0	4,0	01419GA	GA	LI	NBR	40

## TIPOS BÁSICOS

TIPOS BASICOS

STANDARD SEAL DESIGNS

Diâmetro Eixo Diámetro Ejé Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
40,0	50,0	4,0	02633GR	GR	LI	NBR	40
40,0	52,0	6,0	02822BRG	BRG	LI	NBR	40
40,0	52,0	6,0	05712BRAGP	BRAG	H	ACM	40
40,0	52,0	7,0	08312BRF	BR	H	FPM	40
40,0	52,0	7,4	01988BRG	BRG	LI	NBR	40
40,0	52,0	8,0	02430BRGF	BRG	H	FPM	40
40,0	52,0	8,0	07698BAG	BAG	LI	NBR	40
40,0	52,0	9,0	02068BRGP	BRG	BI	ACM	40
40,0	55,0	7,0	05246BRAGF	BRAG	H	FPM	40
40,0	55,0	8,0	01707BRG	BRG	LI	NBR	40
40,0	55,0	8,0	02391BRG	BRG	BI	NBR	40
40,0	55,0	8,0	02541BRGP	BRG	AH	ACM	40
40,0	55,0	8,0	02972BAG	BAG	BI	NBR	40
40,0	55,0	8,0	07021BRGP	BRG	H	ACM	40
40,0	55,0	8,0	07284BRAGP	BRAG	BI	ACM	40
40,0	55,0	8,0	07352BRAGP	BRAG	BI	ACM	40
40,0	55,0	9,0	01155B	B	LI	NBR	40
40,0	55,0	9,5	02419BAG	BAG	BI	NBR	40
40,0	55,0	10,0	07717BRGP	BRG	H	ACM	40
40,0	55,2	10,0	01745BR	BR	LI	NBR	40
40,0	56,0	7,0	02005BAGP	BAG	H	ACM	40
40,0	56,0	7,0	02031BR	BR	LI	NBR	40
40,0	56,0	7,0	02302BAGF	BAG	H	FPM	40
40,0	56,0	7,0	05187BRGF	BRG	H	FPM	40
40,0	56,0	8,0	00880BR	BR	LI	NBR	40
40,0	56,0	8,5	01759GR	GR	LI	NBR	40
40,0	56,0	9,0	01265BAG	BAG	LI	NBR	40
40,0	56,0	10,0	01046BAG	BAG	LI	NBR	40
40,0	56,1	12,0	00265BR	BR	LI	NBR	40
40,0	57,0	12,0	00924BR	BR	LI	NBR	40
40,0	60,0	10,0	01116BR	BR	LI	NBR	40
40,0	60,0	12,0	00897BR	BR	LI	NBR	40
40,0	62,0	11,5	01109BR	BR	LI	NBR	40
40,0	62,0	11,5	01109BRG	BRG	LI	NBR	40
40,0	62,1	10,0	01322BR	BR	LI	NBR	40
40,0	65,0	12,0	01266BAG	BAG	LI	NBR	40
40,0	68,0	12,0	02225BR	BR	AH	NBR	40
40,0	70,0	12,0	00837B	B	LI	NBR	40
40,0	72,0	12,0	01602BAG	BAG	LI	NBR	40
40,0	80,0	10,0	00913BR	BR	LI	NBR	40
40,0	82,9	10,0	02675BRG	BRG	BI	NBR	40
40,2	52,0	7,0	01491BA	BA	LI	NBR	40

Diâmetro Eixo Diámetro Ejé Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
40,5	54,0	7,2	01958BAGS	BAG	BI	MVQ	40
40,8	44,1	3,1	02322GA	GA	LI	NBR	40
40,8	44,1	3,2	02521GA	GA	LI	NBR	40
41,0	49,3	6,5	01963BAG	BAG	H	NBR	40
41,0	65,4	13,0	07381BAG	BAG	BI	NBR	40
41,1	50,8	5,9	03161BA	BA	LI	NBR	40
41,1	65,4	13,0	01100BAG	BAG	BI	NBR	40
41,2	63,5	8,0	02084BAGP	BAG	H	ACM	40
41,2	63,5	8,0	07062BAGP	BAG	H	ACM	40
41,3	54,0	6,5	02356BA	BA	LI	NBR	40
41,3	54,0	6,5	02879BAG	BAG	BI	NBR	40
41,3	59,1	8,0	01989BAG	BAG	BI	NBR	40
41,3	61,8	12,7	01378B	B	LI	NBR	40
41,3	61,9	12,0	00083B	B	LI	NBR	40
41,3	63,6	6,5	02053BAGP	BAG	BI	ACM	40
41,3	63,6	12,7	00133BR	BR	LI	NBR	40
41,3	66,6	12,7	00692B	B	LI	NBR	40
41,3	75,8	6,4	00951GA	GA	LI	NBR	40
41,4	70,6	7,9	01931BAG	BAG	LI	NBR	40
42,0	53,0	7,0	05250BRGF	BRG	H	FPM	40
42,0	54,0	6,0	05600BRGF	BRG	H	FPM	40
42,0	55,0	9,0	02058BAGF	BAG	LI	FPM	40
42,0	56,0	7,0	00288BR	BR	LI	NBR	40
42,0	56,0	7,0	02321BAG	BAG	LI	NBR	40
42,0	58,0	7,0	02059BA	BA	LI	NBR	40
42,0	58,0	7,0	02793BRGF	BRG	H	FPM	40
42,0	58,0	7,0	03164GRG	GRG	LI	NBR	40
42,0	58,0	7,0	05411BA	BA	LI	NBR	40
42,0	60,0	9,0	02296BRG	BRG	AH	NBR	40
42,0	62,0	6,0	01802BR	BR	LI	NBR	40
42,0	62,0	7,0	05510BRGF	BRG	H	FPM	40
42,0	62,0	12,0	00361BA	BA	LI	NBR	40
42,0	62,1	10,0	00521BR	BR	LI	NBR	40
42,0	64,9	12,0	00561BAG	BAG	LI	NBR	40
42,0	65,0	12,0	01506BF	B	LI	FPM	40
42,0	65,0	13,0	01809BS	B	LI	MVQ	40
42,0	65,1	10,0	01505BR	BR	LI	NBR	40
42,0	66,0	6,0	05591BRGF	BRG	H	FPM	40
42,0	72,0	10,0	02039BR	BR	AH	NBR	40
42,0	72,0	12,0	01081BR	BR	LI	NBR	40
42,8	63,4	9,5	00564BR	BR	LI	NBR	40
42,8	68,2	10,7	00533BA	BA	LI	NBR	40

TIPOS BÁSICOS / TIPOS BASICOS / STANDARD SEAL DESIGN

Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.

Before specifying the use of a retainer, please check for availability • 0800 7712155

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
43,0	52,0	6,5	02979BA	BA	LI	NBR	40
43,0	52,0	6,5	02981GA	GA	LI	NBR	40
43,0	62,0	10,0	00604BR	BR	LI	NBR	40
43,0	75,0	10,0	02658BRGF	BRG	AH	FPM	40
44,0	58,0	7,0	02295BA	BA	LI	NBR	40
44,0	60,0	10,0	01552BR	BR	LI	NBR	40
44,0	60,0	10,0	02014BAGP	BAG	AH	ACM	40
44,0	76,1	12,7	00219BR	BR	LI	NBR	40
44,0	79,9	12,0	00775BA	BA	LI	NBR	40
44,2	71,5	14,8	01119BAG	BAG	H	NBR	40
44,3	60,0	7,0	02378BR	BR	LI	NBR	40
44,3	81,0	12,5	02196BR	BR	LI	NBR	40
44,4	63,5	12,7	02580BAG	BAG	BI	NBR	40
44,4	63,5	12,7	02784BAGF	BAG	BI	FPM	40
44,5	54,0	4,8	00749BA	BA	LI	NBR	40
44,5	57,2	9,4	00734BR	BR	LI	NBR	40
44,5	60,3	9,5	00877BR	BR	LI	NBR	40
44,5	61,9	9,5	01859BAG	BAG	H	NBR	40
44,5	62,0	11,0	01095BRG	BRG	BI	NBR	40
44,5	62,0	12,0	01095BRG	BRG	BI	NBR	40
44,5	63,4	4,8	01306GR	GR	LI	NBR	40
44,5	63,5	9,5	01845BRP	BR	H	ACM	40
44,5	63,5	9,5	05107BR	BR	H	NBR	40
44,5	63,6	8,0	02104BA	BA	H	NBR	40
44,5	63,6	12,7	00101B	B	LI	NBR	40
44,5	65,1	8,0	01532BR	BR	LI	NBR	40
44,5	66,7	12,7	00128BR	BR	LI	NBR	40
44,5	68,2	12,7	00588B	B	LI	NBR	40
44,5	68,2	15,9	01679BRG	BRG	LI	NBR	40
44,5	68,2	15,9	01679BRGS	BRG	LI	MVQ	40
44,5	69,8	12,7	00069B	B	LI	NBR	40
44,5	70,0	10,0	01656BR	BR	LI	NBR	40
44,5	73,0	12,0	00276B	B	LI	NBR	40
44,5	79,9	11,1	00554BA	BA	LI	NBR	40
44,7	61,2	9,5	00222BAG	BAG	H	NBR	40
44,8	61,3	12,0	00012BA	BA	LI	NBR	40
45,0	51,9	4,0	02736GA	GA	LI	NBR	40
45,0	55,0	4,0	02634GR	GR	LI	NBR	40
45,0	58,0	9,0	07819BAG	BAG	BI	NBR	40
45,0	60,0	7,0	00272BRG	BRG	LI	NBR	40
45,0	60,0	7,0	02745BRG	BRG	LI	NBR	40
45,0	60,0	8,0	02175BRGP	BRG	BI	ACM	40

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
45,0	60,0	8,0	07012BRGP	BRG	BI	ACM	40
45,0	60,0	9,0	01911BRG	BRG	H	NBR	40
45,0	60,0	9,0	01911BRGF	BRG	H	FPM	40
45,0	60,0	10,0	01738B	B	LI	NBR	40
45,0	60,0	10,0	01851BRG	BRG	H	NBR	40
45,0	60,0	10,0	05303BRGS	BRG	***	***	40
45,0	62,0	7,0	02169BA	BA	LI	NBR	40
45,0	62,0	8,0	01760GR	GR	LI	NBR	40
45,0	62,0	9,0	02110BRG	BRG	LI	NBR	40
45,0	62,0	9,0	02298BRG	BRG	AH	NBR	40
45,0	62,0	9,0	02720BRGP	BRG	H	ACM	40
45,0	62,0	10,0	00063BRG	BRG	LI	NBR	40
45,0	64,0	9,0	01711BRG	BRG	LI	NBR	40
45,0	65,0	8,0	02324BRG	BRG	LI	NBR	40
45,0	65,0	8,0	07394BRAG	BRAG	AH	ACM	40
45,0	65,0	10,0	00359BR	BR	LI	NBR	40
45,0	65,0	10,0	07365BRAGF	BRAG	H	FPM	40
45,0	65,0	12,0	01344BR	BR	LI	NBR	40
45,0	66,2	6,0	01141BR	BR	LI	NBR	40
45,0	67,9	12,0	01207BAG	BAG	LI	NBR	40
45,0	72,0	9,5	01553BR	BR	LI	NBR	40
45,0	72,0	10,0	01906BA	BA	LI	NBR	40
45,0	72,0	12,0	00509BR	BR	LI	NBR	40
45,0	85,0	13,0	01038B	B	LI	NBR	40
45,6	48,8	3,2	02522GA	GA	LI	NBR	40
46,0	56,0	4,0	02591BRG	BRG	LI	NBR	40
46,0	62,0	7,0	00302B	B	LI	NBR	40
46,0	64,0	8,0	07809BRAGF	BRAG	H	FPM	40
46,0	65,5	7,0	01764BRG	BRG	LI	NBR	40
46,0	68,0	12,0	07599BAF	BA	H	FPM	40
46,3	66,6	6,4	00849BA	BA	LI	NBR	40
47,5	62,0	7,0	05589BRGF	BRG	AH	FPM	40
46,7	62,0	9,0	05353BRGF	BRG	H	FPM	40
47,0	62,1	8,0	01140BR	BR	LI	NBR	40
47,5	76,1	9,5	00848GA	GA	LI	NBR	40
47,6	57,2	5,0	02558BAF	BA	H	FPM	40
47,6	62,7	11,1	00368BAG	BAG	LI	NBR	40
47,6	63,5	11,0	01955BAGS	BAG	BI	MVQ	40
47,6	63,6	9,7	02990BAGP	BAG	H	ACM	40
47,6	66,6	12,7	00405B	B	LI	NBR	40
47,6	69,8	12,7	00155B	B	LI	NBR	40
47,6	69,9	9,5	01699BR	BR	LI	NBR	40

## TIPOS BÁSICOS

TIPOS BASICOS  
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Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Page
47,6	70,6	13,5	01369BA	BA	LI	NBR	40
47,6	75,3	6,4	00015GA	GA	LI	NBR	40
47,6	79,3	10,0	01519BR	BR	LI	NBR	40
47,6	82,8	11,0	01460B	B	LI	NBR	40
47,7	62,1	8,0	00264BR	BR	LI	NBR	40
47,7	65,0	8,0	02055BR	BR	H	NBR	40
47,7	73,0	12,0	00674B	B	LI	NBR	40
47,8	65,0	11,7	02365BAG	BAG	H	NBR	40
48,0	62,0	7,0	07366BRGP	BRG	BI	ACM	40
48,0	62,0	8,0	00566BA	BA	LI	NBR	40
48,0	65,0	10,0	00527B	B	LI	NBR	40
48,0	65,0	10,0	08313BRF	BR	H	FPM	40
48,0	65,1	7,0	01147BRG	BRG	LI	NBR	40
48,0	66,0	11,0	02721BRGP	BRG	AH	ACM	40
48,0	66,1	12,0	01793BR	BR	LI	NBR	40
48,0	69,0	10,0	07485BAF	BA	H	FPM	40
48,0	69,0	10,0	07612BAF	BA	H	FPM	40
48,0	70,0	9,0	07699BRG	BRG	BI	NBR	40
48,0	72,0	7,0	02139BRG	BRG	LI	NBR	40
48,0	72,0	10,0	00161BRG	BRG	LI	NBR	40
48,0	72,0	10,0	01902BR	BR	H	NBR	40
48,0	72,1	7,0	00522BRG	BRG	LI	NBR	40
48,0	75,0	8,0	02723BAF	BA	H	FPM	40
49,0	65,0	10,0	01241BAG	BAG	LI	NBR	40
49,0	68,0	12,0	01262BAG	BAG	LI	NBR	40
49,0	75,0	11,0	01017BR	BR	LI	NBR	40
49,2	63,5	9,5	00157BA	BA	LI	NBR	40
49,2	65,0	8,0	00708BR	BR	LI	NBR	40
49,2	69,9	9,5	00072BA	BA	LI	NBR	40
49,2	76,1	12,7	00291B	B	LI	NBR	40
49,2	76,1	12,7	00291BR	BR	LI	NBR	40
49,2	79,4	12,5	01994BR	BR	H	NBR	40
49,2	80,9	11,0	00229B	B	LI	NBR	40
50,0	58,0	4,0	01973GA	GA	LI	NBR	40
50,0	65,0	8,0	01422BR	BR	LI	NBR	40
50,0	65,0	8,0	07452BRAGP	BRAG	BI	ACM	40
50,0	65,0	8,0	07880BRAGF	BRAG	AH	FPM	40
50,0	65,0	8,5	01783BRG	BRG	LI	NBR	40
50,0	65,0	9,0	07820BAG	BAG	LI	NBR	40
50,0	65,0	10,0	01740B	B	LI	NBR	40
50,0	68,0	8,5	01847GR	GR	LI	NBR	40
50,0	68,0	9,0	02108BRG	BRG	LI	NBR	40

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Page
50,0	68,0	10,0	01340BR	BR	LI	NBR	40
50,0	68,0	10,0	05306BRGS	BRG	***	***	40
50,0	68,0	10,0	05659BRGS	BRG	H	MVQ	40
50,0	69,6	12,7	00653B	B	LI	NBR	40
50,0	70,0	10,0	00946BR	BR	LI	NBR	40
50,0	70,0	10,0	05683BRG	BRG	H	NBR	40
50,0	70,0	12,0	01807BAG	BAG	LI	NBR	40
50,0	71,9	12,0	00162BR	BR	LI	NBR	40
50,0	72,0	12,0	01861BRG	BRG	LI	NBR	40
50,0	72,1	10,0	00834BR	BR	LI	NBR	40
50,0	87,0	12,7	01855BAG	BAG	LI	NBR	40
50,8	65,1	12,7	01671GA	GA	LI	NBR	40
50,8	65,1	12,7	02262BAG	BAG	LI	NBR	40
50,8	69,8	12,7	00468B	B	LI	NBR	40
50,8	69,9	11,0	05308BRGP	BRG	H	ACM	40
50,8	71,9	11,9	01878B	B	LI	NBR	40
50,8	73,0	12,7	00630B	B	LI	NBR	40
50,8	76,3	12,7	00048BR	BR	LI	NBR	40
50,8	79,9	10,0	00752BA	BA	LI	NBR	40
50,8	80,0	12,7	00660B	B	LI	NBR	40
50,9	69,8	9,5	00586BR	BR	LI	NBR	40
50,9	69,8	9,5	00586BRG	BRG	H	NBR	40
51,0	58,0	4,0	02342GA	GA	LI	NBR	40
52,0	68,0	6,0	07076GA	GA	LI	NBR	40
52,0	68,0	8,0	03346BRF	BR	BI	FPM	40
52,0	68,0	13,5	07821BAG	BAG	LI	NBR	40
52,0	70,0	8,0	03317BAGP	BAG	BI	ACM	40
52,0	70,0	9,0	07700BAG	BAG	BI	NBR	40
52,0	72,0	12,0	00047B	B	LI	NBR	40
52,0	72,0	12,0	00047BAGF	BAG	LI	FPM	40
52,0	72,0	12,0	01950BAG	BAG	H	NBR	40
52,0	72,0	12,0	07602BRAG	BRAG	BI	FPM	40
52,0	80,1	10,0	00867BR	BR	LI	NBR	40
52,4	68,0	10,5	01187BR	BR	LI	NBR	40
52,4	69,8	12,7	00843B	B	LI	NBR	40
52,4	72,1	11,4	00004B	B	LI	NBR	40
52,4	76,2	7,9	00974BA	BA	LI	NBR	40
52,4	81,0	11,5	00005B	B	LI	NBR	40
53,0	69,9	11,0	05309BRGP	BRG	H	ACM	40
53,0	75,0	12,0	00838B	B	LI	NBR	40
53,0	82,0	7,5	07023GA	GA	LI	NBR	40
53,8	77,7	12,7	00006BA	BA	LI	NBR	40

TIPOS BÁSICOS / TIPOS BASICOS / STANDARD SEAL DESIGN

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Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
53,9	73,0	12,7	00037B	B	LI	NBR	40
53,9	76,2	12,7	00093BA	BA	LI	NBR	40
53,9	81,1	12,0	00231BRG	BRG	LI	NBR	40
54,0	65,0	8,0	01278BA	BA	LI	NBR	40
54,0	72,0	8,0	00563BR	BR	LI	NBR	40
54,0	73,0	9,5	02197BRG	BRG	AH	NBR	40
54,0	73,0	11,0	02207BAGP	BAG	BI	ACM	40
54,0	76,0	8,0	01825BRG	BRG	AH	NBR	40
54,0	76,2	12,7	01864BAG	BAG	LI	NBR	40
54,0	77,7	11,0	02497BRGF	BRG	AH	FPM	40
54,0	77,7	11,0	02660BRGF	BRG	H	FPM	40
54,0	79,4	12,7	00436B	B	LI	NBR	40
54,0	79,4	12,7	00436BAG	BAG	H	NBR	40
54,0	79,4	12,7	01838BAG	BAG	AH	NBR	40
54,0	90,0	12,5	02205BAGP	BAG	BI	ACM	40
54,1	73,0	8,5	01930BAG	BAG	LI	NBR	40
55,0	62,9	5,0	02847GA	GA	LI	NBR	40
55,0	65,0	5,0	02635GR	GR	LI	NBR	40
55,0	68,0	4,0	01035GR	GR	LI	NBR	40
55,0	68,0	8,0	05182BRAGF	BRAG	H	FPM	40
55,0	70,0	8,0	01181BR	BR	LI	NBR	40
55,0	70,0	8,0	05593BRAGF	BRAG	H	FPM	40
55,0	70,1	11,5	01557BR	BR	LI	NBR	40
55,0	72,0	9,0	02111BRG	BRG	LI	NBR	40
55,0	72,0	10,0	01550BR	BR	LI	NBR	40
55,0	72,0	10,0	01550BRP	BR	LI	ACM	40
55,0	72,0	10,0	01969BRGS	BRG	H	MVQ	40
55,0	72,0	10,0	07065BR	BR	LI	NBR	40
55,0	75,0	8,0	03321BRG	BRG	LI	***	40
55,0	75,0	8,0	07691BAF	BA	H	FPM	40
55,0	75,0	10,0	00804BR	BR	LI	NBR	40
55,0	75,0	12,0	00620B	B	LI	NBR	40
55,0	76,0	12,0	01247BA	BA	LI	NBR	40
55,0	80,0	8,0	02529BRG	BRG	H	NBR	40
55,0	80,0	10,0	00459BR	BR	LI	NBR	40
55,0	80,0	13,0	00498BR	BR	LI	NBR	40
55,0	85,0	13,0	01180BR	BR	LI	NBR	40
55,0	90,0	10,0	00793BA	BA	LI	NBR	40
55,0	90,0	12,5	00964B	B	LI	NBR	40
55,0	100,0	12,7	01669BR	BR	LI	NBR	40
55,0	101,6	10,0	00776BA	BA	LI	NBR	40
55,1	82,0	10,0	01637GA	GA	LI	NBR	40

Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
55,4	76,2	12,7	02415BAG	BAG	LI	NBR	40
55,5	80,9	15,5	02181BAG	BAG	H	NBR	40
56,0	85,0	13,0	00919BR	BR	LI	NBR	40
57,0	69,8	6,4	00456BA	BA	LI	NBR	40
57,0	71,0	9,0	05352BRGF	BRG	H	FPM	40
57,0	85,0	12,0	02236BAP	BA	BI	ACM	40
57,1	76,1	11,0	02067BAG	BAG	BI	NBR	40
57,1	76,1	12,7	07181BR	BR	AH	NBR	40
57,1	76,2	12,7	02193BRG	BRG	LI	NBR	40
57,1	80,0	13,0	00735B	B	LI	NBR	40
57,2	73,0	8,0	02066BAG	BAG	BI	NBR	40
57,2	76,0	9,5	01872GA	GA	LI	NBR	40
57,2	76,1	6,3	03393GR	GR	LI	NBR	40
57,2	77,8	10,0	02667BRGP	BRG	BI	ACM	40
57,2	79,3	12,7	00146B	B	LI	NBR	40
57,2	81,0	12,7	00109B	B	LI	NBR	40
57,2	82,5	9,5	02103BAG	BAG	AH	NBR	40
57,2	82,5	9,5	02381BA	BA	BI	NBR	40
57,2	82,5	12,0	07267BAGP	BAG	AH	ACM	40
57,2	82,5	12,7	00321BA	BA	LI	NBR	40
57,2	82,6	6,5	02316GA	GA	LI	NBR	40
57,2	85,0	12,7	00273B	B	LI	NBR	40
57,3	76,2	9,5	01862BAG	BAG	LI	NBR	40
57,3	76,2	12,7	00013B	B	LI	NBR	40
57,3	76,2	12,7	00013BRG	BRG	H	NBR	40
57,3	84,0	8,0	00188BA	BA	LI	NBR	40
58,0	74,0	10,0	05305BRGF	BRG	AH	FPM	40
58,0	75,0	9,0	02112BRG	BRG	LI	NBR	40
58,0	75,0	9,0	02426BRG	BRG	AH	NBR	40
58,0	75,0	12,0	02100BAG	BAG	AH	NBR	40
58,0	75,0	15,0	07913BAG	BAG	BI	NBR	40
58,0	80,0	12,0	02326BRGP	BRG	H	ACM	40
58,0	85,0	13,0	01798BAG	BAG	LI	NBR	40
58,7	79,4	9,6	01995BR	BR	H	NBR	40
58,7	84,1	9,5	00010GA	GA	LI	NBR	40
58,7	85,0	8,0	00070BA	BA	LI	NBR	40
59,5	85,6	12,0	00547B	B	LI	NBR	40
60,0	72,0	6,0	02636GR	GR	LI	NBR	40
60,0	73,0	10,5	07484BRAGF	BRAG	BI	FPM	40
60,0	75,0	8,0	07453BRAGP	BRAG	BI	ACM	40
60,0	75,1	8,0	00501BR	BR	LI	NBR	40
60,0	76,2	11,1	05126BRGF	BRG	AH	FPM	40

## TIPOS BÁSICOS

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Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material Iábio Material Labio Material	Página Pagina Page
60,0	78,1	8,8	00305BAG	BAG	LI	NBR	40
60,0	80,0	10,0	00223BR	BR	AH	NBR	40
60,0	80,0	10,0	02955BRF	BR	AH	FPM	40
60,0	80,0	12,0	01392BAG	BAG	LI	NBR	40
60,0	80,0	13,0	00818BR	BR	LI	NBR	40
60,0	82,0	12,0	00977BR	BR	LI	NBR	40
60,0	82,0	12,0	01841BRG	BRG	AH	NBR	40
60,0	82,0	12,0	01842BRG	BRG	H	NBR	40
60,0	85,1	12,7	01194BR	BR	LI	NBR	40
60,0	90,0	8,0	02685BR	BR	LI	NBR	40
60,0	90,0	10,0	00517BR	BR	LI	NBR	40
60,2	85,8	9,5	01755BA	BA	BI	NBR	40
60,3	79,4	9,5	02077BAG	BAG	H	NBR	40
60,3	79,4	12,0	02206BAGP	BAG	BI	ACM	40
60,3	82,5	11,0	02116BAP	BA	H	ACM	40
60,3	85,0	12,0	00371B	B	LI	NBR	40
60,3	85,1	6,4	01345BA	BA	LI	NBR	40
60,3	88,4	11,0	00021B	B	LI	NBR	40
60,3	90,0	12,5	02204BAGP	BAG	LI	ACM	40
60,3	92,0	12,0	00334BAG	BAG	H	NBR	40
60,4	79,4	9,3	01050BR	BR	LI	NBR	40
60,4	79,4	9,3	01050BRGS	BRG	H	MVQ	40
60,4	79,4	9,3	02578BRGF	BRG	H	FPM	40
61,9	80,0	10,0	01828B	B	LI	NBR	40
62,0	85,0	10,0	00460BR	BR	LI	NBR	40
62,0	85,0	13,0	00044BR	BR	LI	NBR	40
62,0	92,0	9,5	00065GA	GA	LI	NBR	40
62,0	100,1	17,0	01425BA	BA	LI	NBR	40
63,0	80,0	12,0	07823BAG	BAG	BI	NBR	40
63,0	81,0	10,0	01408BA	BA	LI	NBR	40
63,5	76,1	9,5	00907BR	BR	LI	NBR	40
63,5	76,2	6,4	01870GA	GA	LI	NBR	40
63,5	82,5	12,7	01790B	B	LI	NBR	40
63,5	82,6	12,7	02478BAGF	BAG	AH	FPM	40
63,5	82,6	12,7	02504BAGP	BAG	AH	ACM	40
63,5	85,6	12,7	01541BAG	BAG	LI	NBR	40
63,5	88,9	11,0	02498BRGF	BRG	H	FPM	40
63,5	88,9	12,7	00120BAG	BAG	LI	NBR	40
63,5	88,9	12,7	01863BA	BA	LI	NBR	40
63,5	89,9	12,0	00378B	B	LI	NBR	40
63,5	110,0	13,0	01462B	B	LI	NBR	40
63,6	88,9	13,5	02256BAG	BAG	BI	NBR	40

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material Iábio Material Labio Material	Página Pagina Page
63,9	73,0	3,2	02255GA	GA	LI	NBR	40
64,0	80,0	8,0	02004BAGP	BAG	AH	ACM	40
64,0	80,0	8,0	05062BRAG	BRAG	AH	FPM	40
64,0	80,0	9,0	05055BRAGF	BRAG	H	FPM	40
64,0	88,0	6,0	05588BRGF	BRG	H	FPM	40
64,0	90,0	10,0	02399BRGS	BRG	H	MVQ	40
65,0	80,0	8,0	01160BR	BR	LI	NBR	40
65,0	85,0	10,0	02530BRG	BRG	LI	NBR	40
65,0	85,1	10,0	00926BR	BR	LI	NBR	40
65,0	88,5	12,7	00903BA	BA	LI	NBR	40
65,0	90,0	10,0	00051BRP	BR	LI	ACM	40
65,0	90,0	13,0	00164BAG	BAG	LI	NBR	40
65,0	90,0	13,0	00164BR	BR	LI	NBR	40
65,0	90,0	15,0	01810BAGS	BAG	H	MVO	40
65,0	90,0	15,0	01810BRAGF	BRAG	H	FPM	40
65,0	90,0	15,0	07373BRAGF	BRAG	H	FPM	40
65,0	100,0	13,0	02113BR	BR	AH	NBR	40
65,8	88,4	12,7	00058B	B	LI	NBR	40
66,7	88,4	12,7	00651B	B	LI	NBR	40
66,7	88,9	12,7	00369BR	BR	LI	NBR	40
66,7	92,0	12,0	00030B	B	LI	NBR	40
66,7	95,3	12,7	00379BR	BR	LI	NBR	40
66,7	112,7	11,0	00434B	B	LI	NBR	40
68,0	85,0	10,0	02556BAF	BA	H	FPM	40
68,0	85,0	10,0	02557BRG	BRG	LI	NBR	40
68,0	85,0	10,0	07603BRAF	BRA	H	FPM	40
68,0	90,0	10,0	00228BAG	BAG	LI	NBR	40
68,0	90,0	10,0	02292BAF	BA	AH	FPM	40
68,0	90,0	13,0	02445BR	BR	LI	NBR	40
68,0	90,0	13,0	00500BAG	BAG	H	NBR	40
68,0	90,0	13,0	00500BAGF	BAG	H	FPM	40
68,0	90,0	13,0	00500BAGP	BAG	H	ACM	40
68,0	90,0	13,0	01762BAGF	BA	AH	FPM	40
69,0	85,0	10,0	07822BAG	BAG	LI	NBR	40
69,8	90,0	8,0	02422BRP	BR	BI	ACM	40
69,8	90,0	10,0	02423BAG	BAG	LI	NBR	40
69,8	92,0	11,0	02499BRGF	BRG	AH	FPM	40
69,8	92,0	14,2	00891BRG	BRG	LI	NBR	40
69,8	95,2	12,7	00376B	B	LI	NBR	40
69,8	98,5	11,8	01880BAG	BAG	H	NBR	40
69,9	88,9	12,7	02085BA	BA	AH	NBR	40
69,9	98,5	12,7	00081B	B	LI	NBR	40

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Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material labio Material Labio Material	Página Pagina Page
70,0	81,5	6,0	07684GR	GR	LI	NBR	40
70,0	85,0	7,0	02637GR	GR	LI	NBR	40
70,0	85,0	8,0	00906BR	BR	LI	NBR	40
70,0	85,0	8,0	02269BAGP	BAG	AH	ACM	40
70,0	85,0	8,0	02297BAGF	BAG	AH	FPM	40
70,0	85,0	8,0	02398BAGS	BAG	AH	MVQ	40
70,0	85,0	8,0	02677BRG	BRG	LI	NBR	40
70,0	86,0	7,0	05599BRGF	BRG	AH	FPM	40
70,0	90,0	10,0	01135BR	BR	AH	NBR	40
70,0	90,0	10,0	01135BRG	BRG	AH	NBR	40
70,0	90,0	10,0	01135BRGS	BRG	AH	MVQ	40
70,0	90,0	10,0	01135BRP	BR	AH	ACM	40
70,0	90,0	10,0	01135BRS	BR	AH	MVQ	40
70,0	90,0	10,0	02192BRGP	BRG	BI	ACM	40
70,0	90,0	13,0	00490BR	BR	LI	NBR	40
70,0	90,0	15,0	02061BRGF	BRG	H	FPM	40
70,0	90,5	10,0	01927BRP	BR	AH	ACM	40
70,0	95,0	13,0	01879BRG	BRG	AH	NBR	40
70,0	100,0	10,0	00866BR	BR	LI	NBR	40
70,0	100,0	12,0	00423BR	BR	LI	NBR	40
70,0	100,0	13,0	07914BAG	BAG	BI	NBR	40
72,2	95,3	9,7	05025BRGS	BRG		MVQ	40
72,2	100,0	12,7	00087B	B	LI	NBR	40
72,5	92,2	9,0	02759BAG	BAG	AH	NBR	40
73,0	95,2	12,7	00098B	B	LI	NBR	40
73,0	101,6	12,7	00116B	B	LI	NBR	40
74,0	90,0	10,0	01044BAG	BAG	LI	NBR	40
74,0	90,0	10,0	05075BRAGF	BRAG	AH	FPM	40
74,0	114,0	11,0	00573B	B	LI	NBR	40
74,9	100,0	13,0	01687BA	BA	H	NBR	40
75,0	90,0	10,0	02451BRG	BRG	LI	NBR	40
75,0	90,0	12,0	00893BA	BA	LI	NBR	40
75,0	95,0	5,0	01673BA	BA	LI	NBR	40
75,0	95,0	10,0	02531BR	BR	BI	NBR	40
75,0	95,0	10,0	07290BRAGF	BRAG	BI	FPM	40
75,0	95,0	12,0	02191BRF	BR	AH	FPM	40
75,0	95,0	13,0	02753BRG	BRG	LI	NBR	40
75,0	95,1	13,0	00046BR	BR	LI	NBR	40
75,0	100,0	10,0	00609BR	BR	LI	NBR	40
75,0	100,0	10,0	02671BRGF	BRG	BI	FPM	40
75,0	100,0	12,0	00269BAGS	BAG	H	MVQ	40

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material labio Material Labio Material	Página Pagina Page
75,0	100,0	12,0	00269BR	BR	LI	NBR	40
75,0	100,0	17,0	02199BAGF	BAG	H	FPM	40
75,0	105,0	13,0	01183BR	BR	LI	NBR	40
75,9	95,0	11,3	01856BRGP	BRG	AH	ACM	40
76,0	89,7	5,5	02780BRF	BR	AH	FPM	40
76,2	95,2	9,7	05125BRGS	BRG	AH	MVQ	40
76,2	95,3	9,5	05108BRS	BR	AH	MVQ	40
76,2	95,3	9,7	01852BRS	BR	AH	MVQ	40
76,2	98,5	11,9	01857B	B	LI	NBR	40
76,2	101,7	12,0	00357B	B	LI	NBR	40
76,2	101,7	12,0	00357BA	BA	LI	NBR	40
78,0	100,0	13,0	01917BRGS	BRG	H	MVQ	40
78,0	110,0	13,0	00819BR	BR	LI	NBR	40
79,0	95,3	11,0	05166BRAGF	BRAG	AH	FPM	40
79,0	111,6	10,7	01301BA	BA	LI	NBR	40
79,4	104,7	12,7	00221B	B	LI	NBR	40
79,4	109,9	13,0	00466B	B	LI	NBR	40
79,4	114,3	12,7	01148BR	BR	LI	NBR	40
79,4	117,4	14,3	00008B	B	LI	NBR	40
80,0	98,0	10,0	02524BRAGF	BRAG	AH	FPM	40
80,0	98,0	10,0	02702BRAGF	BRAG	AH	FPM	40
80,0	100,0	8,0	05601BRGF	BRG	AH	FPM	40
80,0	100,0	10,0	00610BR	BR	LI	NBR	40
80,0	100,0	10,0	02664BAGP	BAG	BI	ACM	40
80,0	100,0	10,0	03017BAGF	BAG	BI	FPM	40
80,0	100,0	10,0	05675BRGF	BRG	H	FPM	40
80,0	100,0	12,0	02235BAGS	BAG	H	MVQ	40
80,0	100,0	12,0	02291BAF	BA	H	FPM	40
80,0	100,0	12,0	02661BRG	BRG	H	NBR	40
80,0	100,0	12,0	02662BRG	BRG	AH	NBR	40
80,0	100,0	12,0	05302BRS	BR	***	***	40
80,0	110,0	12,0	00900BR	BR	LI	NBR	40
81,0	114,2	12	00134B	B	LI	NBR	40
81,0	117,5	14,3	00002B	B	LI	NBR	40
82,0	104,7	14,3	00593B	B	LI	NBR	40
82,0	105,0	12,0	01945BRGS	BRG	AH	MVQ	40
82,0	105,0	13,0	00480BA	BA	LI	NBR	40
82,5	107,9	11,9	00644B	B	LI	NBR	40
82,5	107,9	16	07098BR	BR	LI	NBR	40
82,5	120,0	15,0	02416BAG	BAG	BI	NBR	40
82,6	107,9	14,3	01195B	B	LI	NBR	40
84,0	110,1	16,0	00612BR	BR	LI	NBR	40

## TIPOS BÁSICOS

TIPOS BASICOS

STANDARD SEAL DESIGNS

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page
85,0	100,0	8,6	05713BAGP	BAG	AH	ACM	40
85,0	105,0	9,0	05590BRGF	BRG	AH	FPM	40
85,0	105,0	10,0	02606BAF	BA	H	FPM	40
85,0	105,0	10,0	02801BAF	BA	AH	FPM	40
85,0	105,0	10,0	07610BAF	BA	AH	FPM	40
85,0	105,0	10,0	07611BA	BA	LI	NBR	40
85,0	105,0	11,0	02607BRG	BRG	LI	NBR	40
85,0	105,0	12,0	01981BRGS	BRG	AH	MVQ	40
85,0	105,0	12,0	02283BRGF	BRG	AH	FPM	40
85,0	110,0	12,0	01767BR	BR	LI	NBR	40
85,0	110,0	14,0	00618BAG	BAG	LI	NBR	40
85,7	107,9	12,7	02352B	B	LI	NBR	40
85,7	114,2	11,2	01912BRG	BRG	LI	NBR	40
85,7	114,3	13,0	05304BRAGF	BRAG	H	FPM	40
85,7	119,0	12,7	00025B	B	LI	NBR	40
85,9	104,0	11,0	02264BRGF	BRG	AH	FPM	40
87,3	120,8	14,3	00085B	B	LI	NBR	40
88,0	108,0	10,1	05254BRGF	BRG	AH	FPM	40
88,0	110,0	13,0	00737BA	BA	LI	NBR	40
88,9	126,9	12,7	00642B	B	LI	NBR	40
89,0	114,0	13,0	07220BRG	BRG		NBR	40
89,0	114,3	11,5	00300B	B	LI	NBR	40
89,0	114,3	12,7	01253B	B	LI	NBR	40
90,0	104,0	11,0	05343BRAGF	BRAG	AH	FPM	40
90,0	110,0	7,0	05512BRGF	BRG	AH	FPM	40
90,0	110,0	9,0	05420BRGF	BRG	AH	FPM	40
90,0	110,0	12,0	02574BR	BR	BI	NBR	40
90,0	110,0	13,0	05509BRGS	BRG	H	MVQ	40
90,0	110,1	13,0	01416BAG	BAG	LI	NBR	40
90,0	112,7	13,0	01829B	B	LI	NBR	40
90,0	115,0	13,0	02325BRGP	BRG	AH	ACM	40
90,0	120,0	12,0	02208BAGP	BAG	BI	ACM	40
90,0	120,0	12,0	02751BRG	BRG	BI	NBR	40
90,0	120,0	13,0	00497BRG	BRG	LI	NBR	40
90,1	110,0	13,0	02450BRGP	BRG	H	ACM	40
92,0	126,9	12,7	00366B	B	LI	NBR	40
92,1	107,7	10,0	02604BRGF	BRG	AH	FPM	40
92,1	124,0	15,8	00442BR	BR	LI	NBR	40
93,0	157,0	4,0	02299BAGE	BAG	LI	NBR	40
94,9	115,0	10	05091BRGF	BRG	AH	FPM	40
94,9	130,0	13,0	01043B	B	LI	NBR	40
95,0	115,0	13,0	02690BRG	BRG	BI	NBR	40

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Pagina Page	
95,0	115,0	13,0	02938BRAG	BRAG		BI	NBR	40
95,0	115,0	13,0	07291BRAGF	BRAG		BI	FPM	40
95,0	125,0	13,0	00045B	B		LI	NBR	40
95,3	120,6	12,7	01257B	B		LI	NBR	40
98,0	120,0	7,0	05587BRGF	BRG	AH	FPM	40	
98,4	126,9	12,0	02213B	B		LI	NBR	40
98,5	144,5	19,0	00007B	B		LI	NBR	40
99,9	130,0	12,0	07121BR	BR		LI	NBR	40
100,0	120,0	11,0	01375BR	BR		LI	NBR	40
100,0	123,8	13,0	01801B	B		LI	NBR	40
100,0	125,0	12,0	01549BR	BR		LI	NBR	40
100,0	125,0	12,0	01549BRA	BRA		LI	NBR	40
100,0	125,0	12,0	07322BRA	BRA		LI	NBR	40
100,0	129,9	13,0	07323BRG	BRG		LI	NBR	40
100,0	130,0	12,0	01721BR	BR		LI	NBR	40
100,0	130,0	12,0	01721BRGP	BRG		LI	ACM	40
100,0	130,0	13,0	00043BA	BA		LI	NBR	40
100,0	130,0	13,0	01974BRG	BRG		LI	NBR	40
100,0	162,1	15,0	00439BR	BR		LI	NBR	40
101,6	125,0	13,0	05421BRGF	BRG	AH	FPM	40	
101,6	126,9	11,2	02117BAS	BA	AH	MVQ	40	
101,6	126,9	12,7	00123B	B		LI	NBR	40
101,6	130,1	14,3	00631B	B		LI	NBR	40
102,0	130,0	13,0	00616BR	BR		LI	NBR	40
105,0	130,0	12,0	02985BRF	BR	AH	FPM	40	
105,0	130,0	12,0	07840BRAGF	BRAG	AH	FPM	40	
105,0	130,0	13,0	00491B	B		LI	NBR	40
105,0	135,0	12,0	02347GRE	GR		LI	NBR	40
105,0	135,0	15,0	01774BRG	BRG		LI	NBR	40
105,0	140,0	12,0	02195BR	BR	BI	NBR	40	
105,0	142,9	12,7	01268BA	BA		LI	NBR	40
106,4	126,9	12,0	00650B	B		LI	NBR	40
108,0	133,3	9,5	01103B	B		LI	NBR	40
108,0	133,3	12,0	00536B	B		LI	NBR	40
108,0	136,5	12,7	01468B	B		LI	NBR	40
108,2	144,5	19,0	02021B	B		BI	NBR	40
110,0	130,0	13,0	00803BAG	BAG		LI	NBR	40
110,0	130,0	13,0	00803BAS	BA		LI	MVQ	40
110,0	130,0	13,0	00803BRGS	BRG	AH	MVQ	40	
110,0	140,0	13,0	00516B	B		LI	NBR	40
110,0	180,0	15,0	01427BR	BR		LI	NBR	40

TIPOS BÁSICOS / TIPOS BASICOS / STANDARD SEAL DESIGN

Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.

Before specifying the use of a retainer, please check for availability • 0800 7712155

## TIPOS BÁSICOS

TIPOS BASICOS  
STANDARD SEAL DESIGNS

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
110,3	133,3	12,0	01739B	B	LI	NBR	40
112,5	130,0	11,0	05150BRAGF	BRAG	AH	FPM	40
114,0	135,0	13,0	05684BAG	BAG	H	NBR	40
114,3	139,7	12,7	02214B	B	LI	NBR	40
114,3	139,7	14,3	00125B	B	LI	NBR	40
114,3	152,4	12,7	01412B	B	LI	NBR	40
115,0	140,0	13,0	00514BR	BR	LI	NBR	40
117,4	142,9	12,5	07312BR	BR	LI	NBR	40
117,4	142,9	12,5	07461BRF	BR	LI	FPM	40
118,0	140,0	13,0	01770B	B	LI	NBR	40
119,0	146,0	14,3	00099B	B	LI	NBR	40
119,0	162,1	15,0	00546BR	BR	LI	NBR	40
119,5	145,0	15,0	07372BRAG	BRAG	BI	NBR	40
120,0	140,0	13,0	00688BAP	BA	AH	ACM	40
120,0	140,0	13,0	02697BRAGF	BRAG	AH	FPM	40
120,0	140,2	13,0	01885BAGP	BAG	H	ACM	40
120,0	145,0	15,0	01884BRAG	BRAG	BI	NBR	40
120,0	145,0	15,0	07319BRAGF	BRAG	BI	FPM	40
120,7	146,1	12,5	00250BR	BR	LI	NBR	40
120,7	146,1	12,5	00250BRP	BR	LI	ACM	40
122,2	140,8	11,8	02115BRGS	BRG	AH	MVQ	40
122,2	140,8	11,8	02612BRGF	BRG	AH	FPM	40
122,2	140,8	12,0	02449BRGF	BRG	AH	FPM	40
125,0	150,0	13,0	02868BRG	BRG	BI	NBR	40
125,0	150,0	15,0	02156BAGF	BAG	AH	FPM	40
125,0	150,0	15,0	02941BRAG	BRAG	BI	NBR	40
125,0	150,0	15,0	02941BRAGF	BRAG	BI	FPM	40
125,0	150,0	15,0	07371BRAGF	BRAG	BI	FPM	40
125,0	150,1	13,0	00420BR	BR	LI	NBR	40
125,0	160,0	12,0	00780BR	BR	LI	NBR	40
127,0	158,7	12,7	00309B	B	LI	NBR	40
127,0	165,1	16,0	00310B	B	LI	NBR	40
130,0	160,0	12,0	01193BR	BR	LI	NBR	40
130,0	160,0	13,0	01822BAP	BA	LI	ACM	40
130,0	160,0	14,0	05578BRGF	BRG	AH	FPM	40
130,0	160,0	15,0	02069BRGS	BRG	AH	MVQ	40
133,0	160,0	15,0	01953BRG	BRG	AH	NBR	40
133,3	158,8	13,0	01972BRGS	BRG	AH	MVQ	40
133,3	158,8	13,0	02583BRGF	BRG	AH	FPM	40
133,4	155,6	14,0	02245BAG	BAG	BI	NBR	40
133,4	165,1	15,9	01362B	B	H	NBR	40
135,0	190,0	15,0	00042BR	BR	LI	NBR	40

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
136,5	168,3	15,9	00649B	B	LI	NBR	40
140,0	165,0	15,0	02185BAGF	BAG	AH	FPM	40
140,0	170,0	13,0	00502BR	BR	LI	NBR	40
140,0	180,0	15,0	02223B	B	LI	NBR	40
142,9	171,1	14,3	00248BR	BR	LI	NBR	40
145,0	175,0	13,0	02293BF	B	BI	FPM	40
145,0	175,0	13,0	02778B	B	BI	NBR	40
145,0	175,0	14,0	02679BRG	BRG	LI	NBR	40
146,0	168,3	16,0	01928B	B	H	NBR	40
150,0	180,0	13,0	01910BRP	BR	H	ACM	40
150,0	180,0	13,0	01910BRS	BR	H	MVQ	40
150,0	180,0	15,0	01424BR	BR	LI	NBR	40
150,0	180,0	15,0	02932BAGF	BAG	BI	FPM	40
150,0	180,0	15,0	02933BRG	BRG	LI	NBR	40
150,8	177,8	12,5	02093BRG	BRG	LI	NBR	40
155,0	180,0	15,0	05414BRAGF	BRAG	AH	FPM	40
160,0	200,0	12,0	01951BR	BR	LI	NBR	40
161,9	187,3	9,5	02054BR	BR	LI	NBR	40
165,0	190,0	12,9	00160BR	BR	LI	NBR	40
165,0	190,5	12,7	02056BR	BR	LI	NBR	40
165,1	193,7	15,7	01976B	B	LI	NBR	40
168,0	188,0	31,5	02246BAG	BAG	BI	NBR	40
168,0	188,0	31,5	08317BAGF	BAG	BI	FPM	40
174,6	200,0	16,0	02138B	B	LI	NBR	40
180,0	205,0	15,0	05725BRAGF	BRAG	AH	FPM	40
185,0	210,0	13,0	01676BR	BR	LI	NBR	40
190,0	220,0	14,8	00268BR	BR	LI	NBR	40
190,0	220,0	14,8	00268BRP	BR	LI	ACM	40



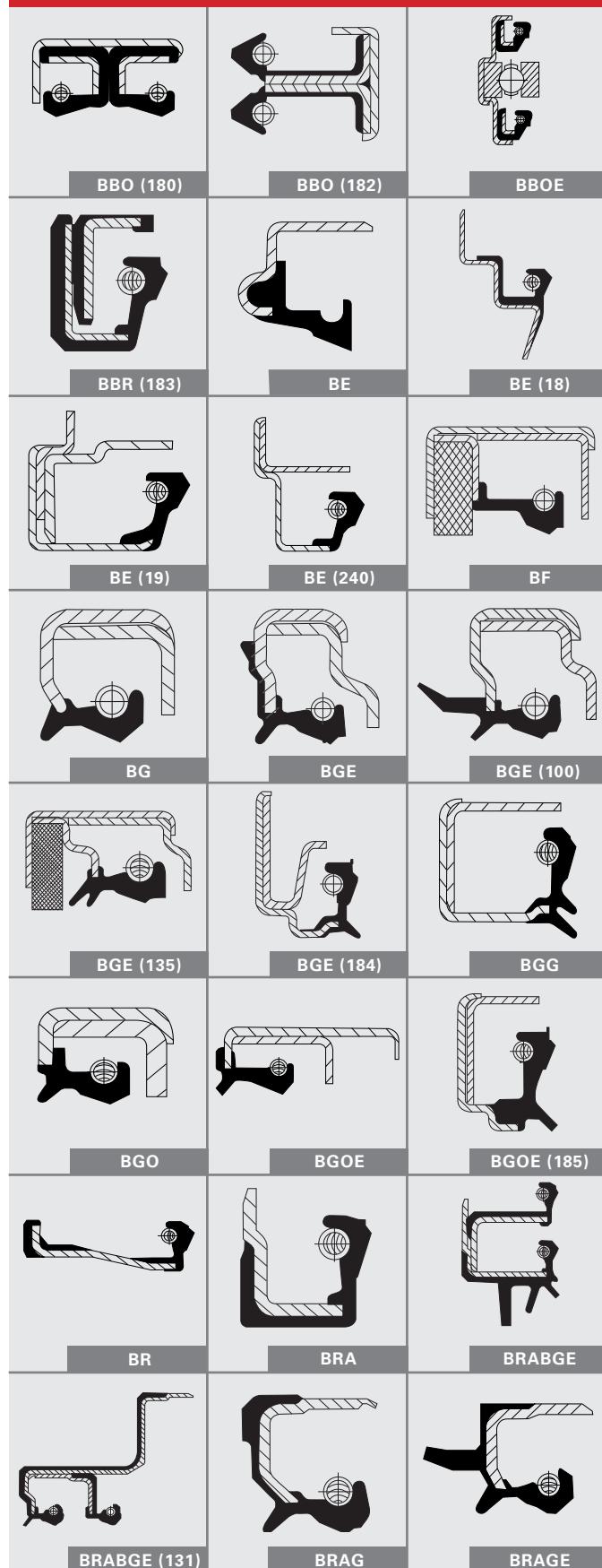
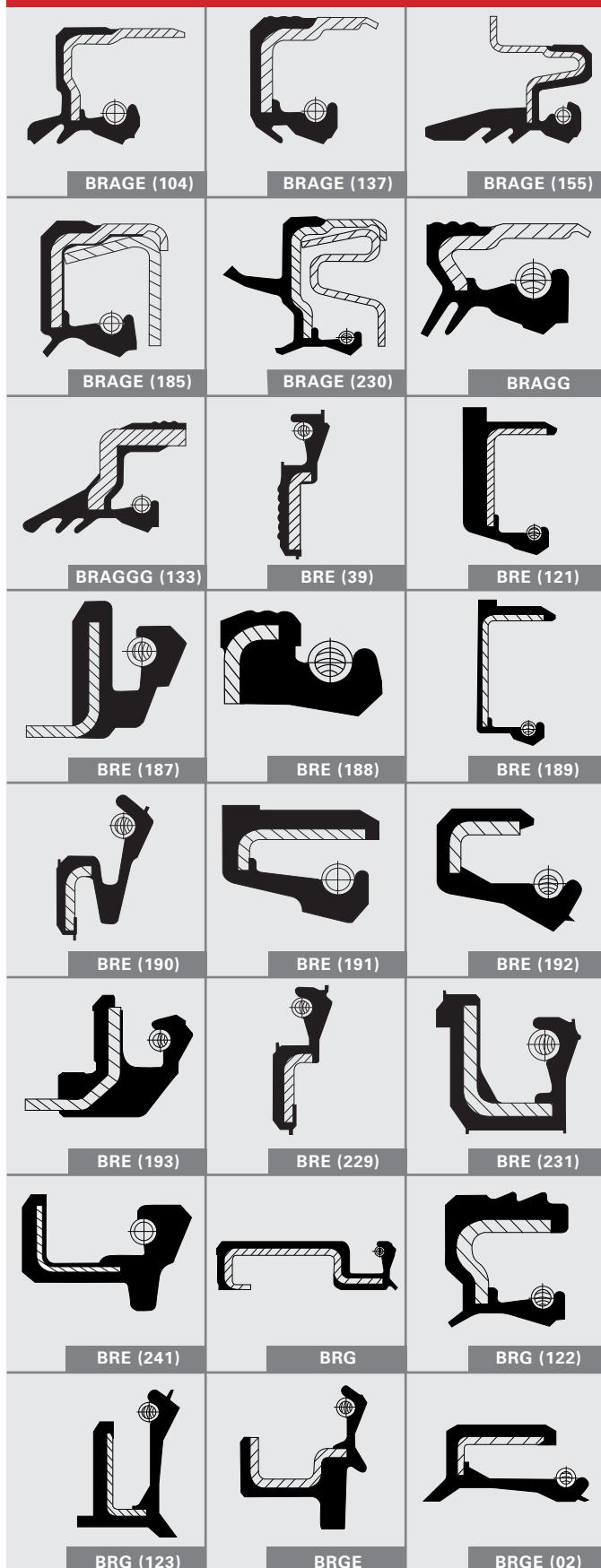
## **ANOTAÇÕES**

## **ANOTACIONES**

## REMARKS

**Antes de especificar a utilização de um retentor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.**  
Before specifying the use of a retainer, please check for availability • **0800 7712155**

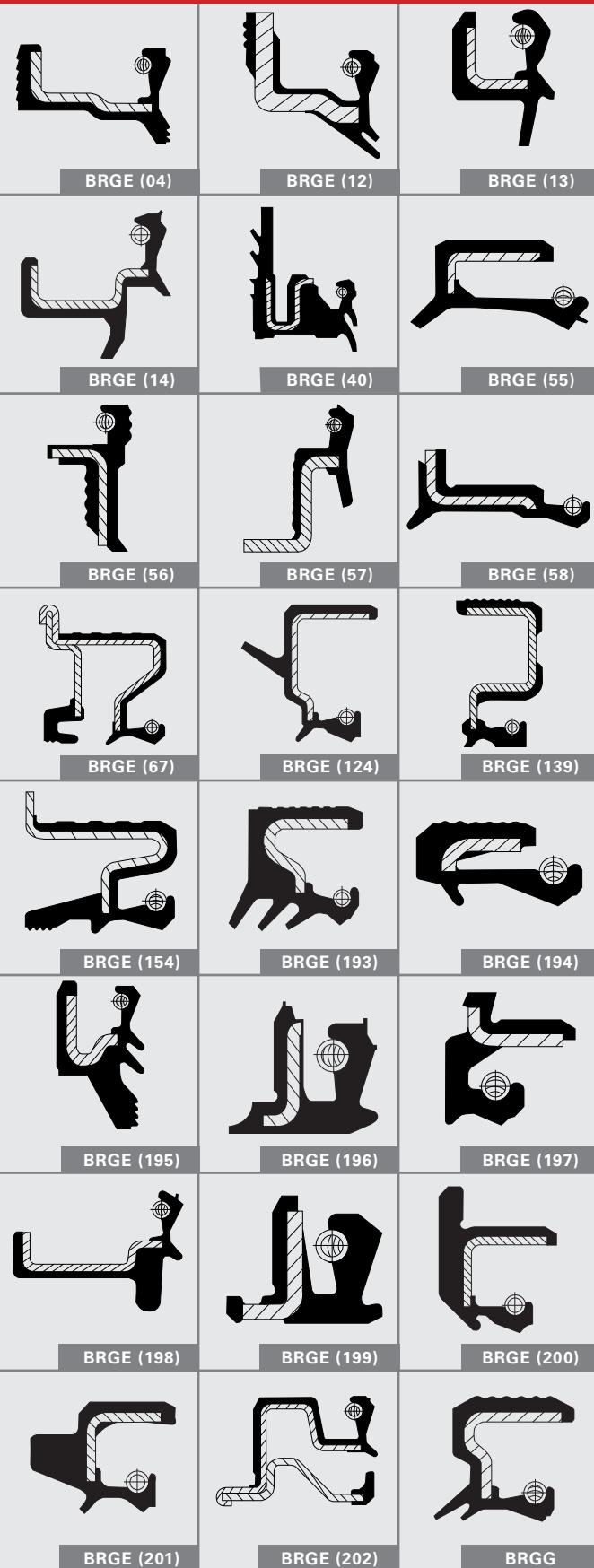


**GRUPO A**
**TIPOS ALTERNATIVOS**  
**TIPOS ALTERANTIVOS**  
**ALTERNATIVE SEAL DESIGN**

**GRUPO A**
**TIPOS ALTERNATIVOS**  
**TIPOS ALTERANTIVOS**  
**ALTERNATIVE SEAL DESIGN**

**TIPOS ALTERNATIVOS / TIPOS ALTERANTIVOS / ALTERNATIVE SEAL DESIGN**

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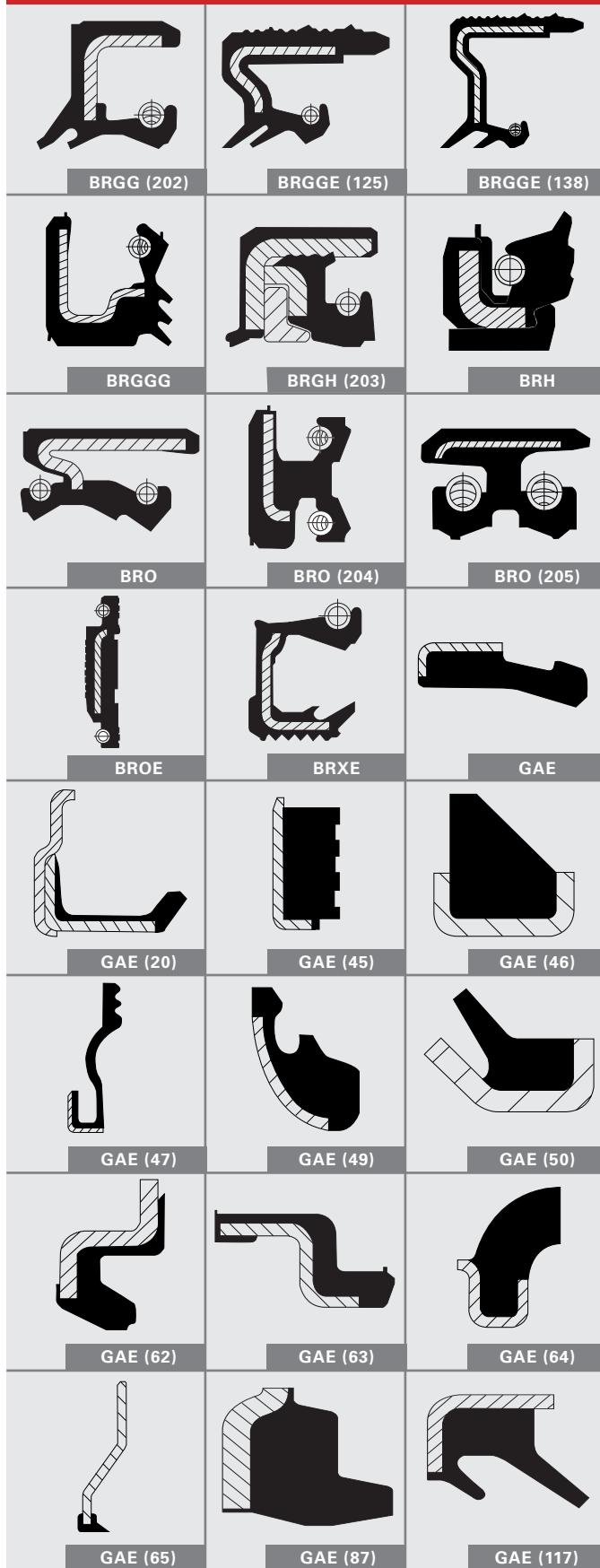
**GRUPO A**

**TIPOS ALTERNATIVOS**  
TIPOS ALTERNATIVOS  
ALTERNATIVE SEAL DESIGN



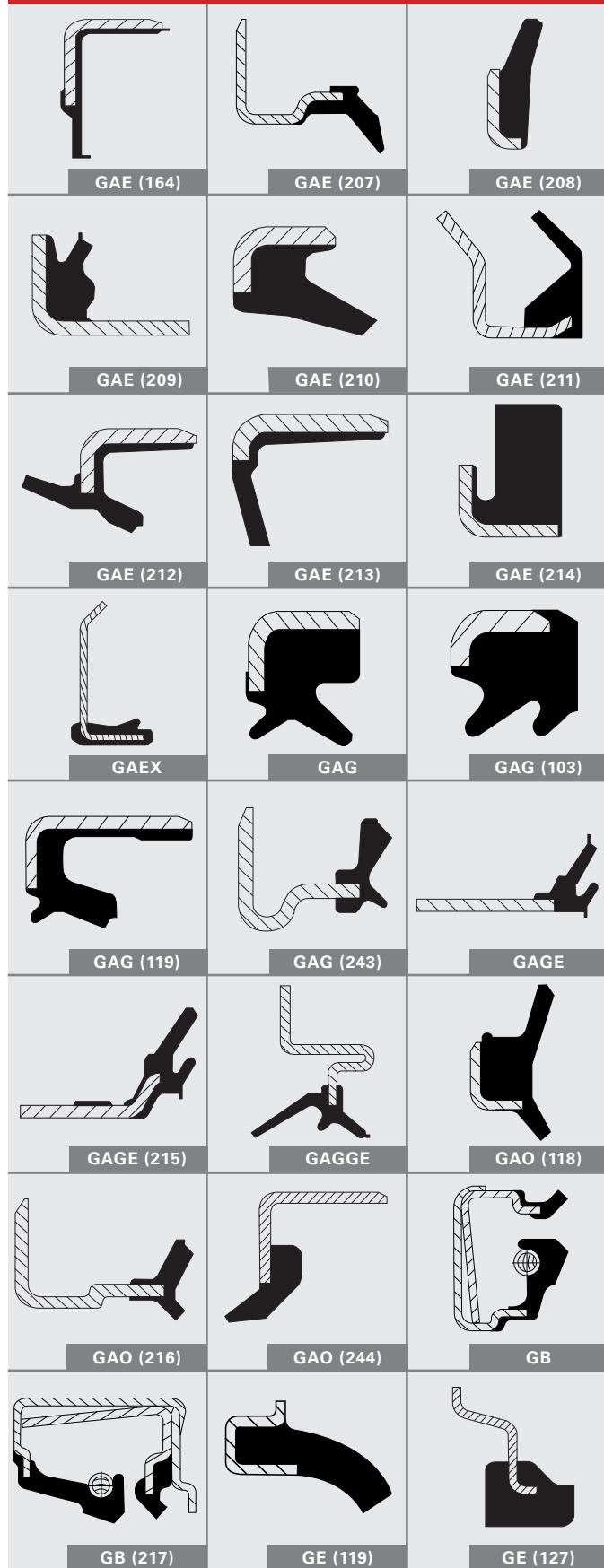
**GRUPO A**

**TIPOS ALTERNATIVOS**  
TIPOS ALTERNATIVOS  
ALTERNATIVE SEAL DESIGN

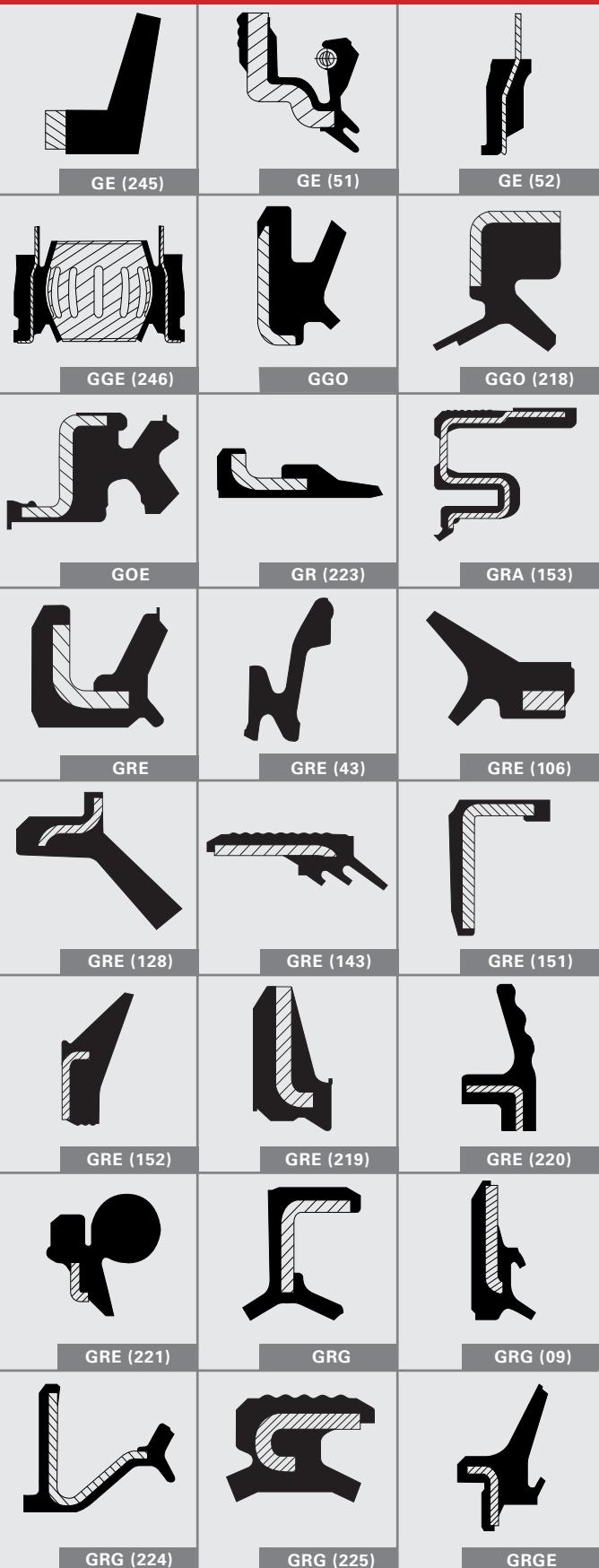


**GRUPO A**

**TIPOS ALTERNATIVOS**  
**TIPOS ALTERANTIVOS**  
**ALTERNATIVE SEAL DESIGN**


**GRUPO A**

**TIPOS ALTERNATIVOS**  
**TIPOS ALTERANTIVOS**  
**ALTERNATIVE SEAL DESIGN**



TIPOS ALTERNATIVOS / TIPOS ALTERANTIVOS / ALTERNATIVE SEAL DESIGN

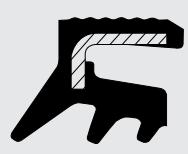
Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.  
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### GRUPO A

**TIPOS ALTERNATIVOS**  
TIPOS ALTERNATIVOS  
ALTERNATIVE SEAL DESIGN



GRGE (120)



GRGE (226)



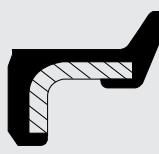
GRGG



GRL



GRO



GRO (247)

### GRUPO B

**RETENTORES P/ SISTEMAS HIDRÁULICOS**  
RETENES Y GUARNICIONES P/ SISTEMAS HIDRAULICOS  
HIDRAULIC SYSTEMS SEALS



NEH



U (A)



U (B)



U (C)



GRE (250)

### GRUPO C

**RETENTORES PARA MOVIMENTO AXIAL**  
RETENES PARA MOVIMENTO AXIAL  
AXIAL MOVEMENT SEALS



BAGE (144)



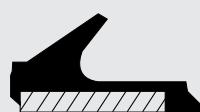
BAGE (26)



BRE (228)



BRGE (21)



GAE (242)



GR (248)

### GRUPO D

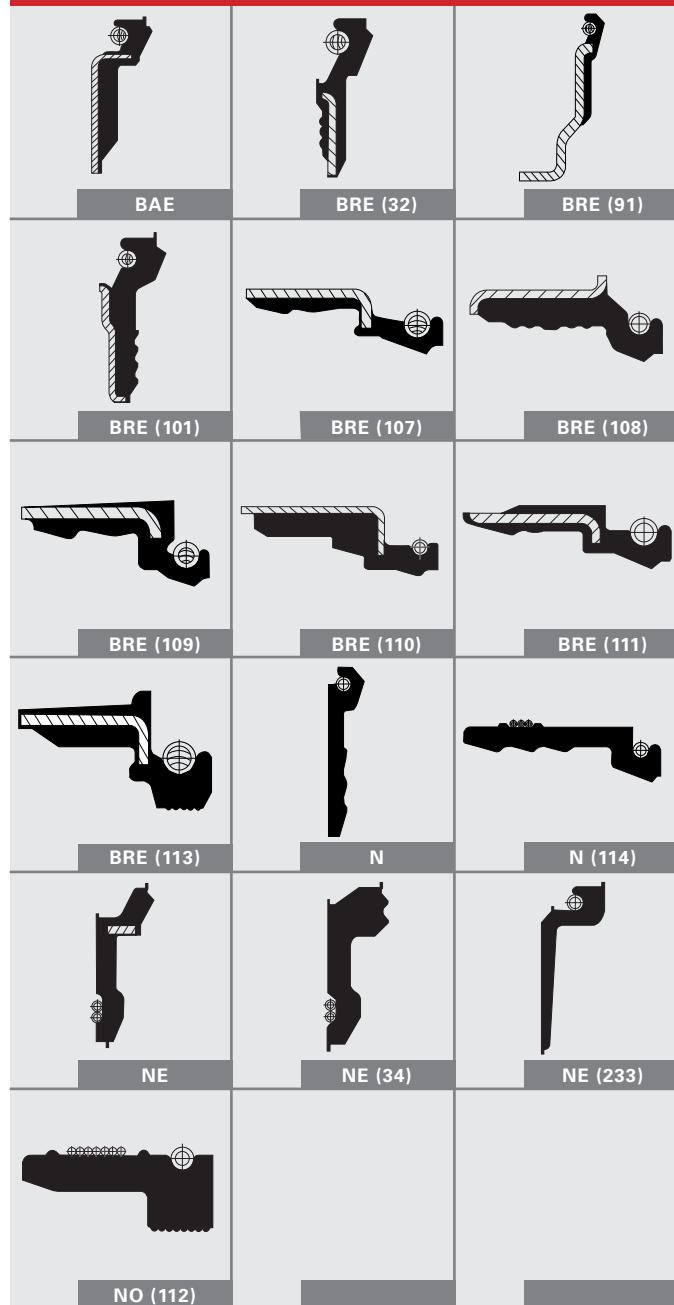
**PISTAS PARA RETENTORES**  
PISTA PARA EL RETEN  
SLEEVE



GE

**GRUPO E**

**RETENTORES PARA HASTE DE VÁLVULAS**  
**REtenES PARA GUIA DE VALVULAS**  
**VALVE STEM SEALS**


**GRUPO F**

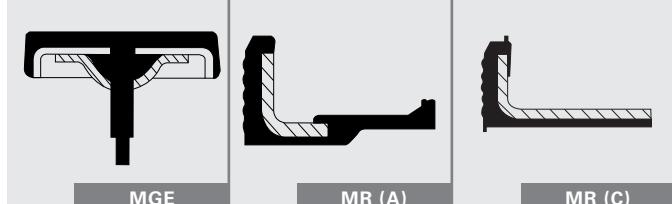
**RETENTORES PARA VEDAÇÃO EXTERNA**  
**REtenES PARA RETENCIÓN EXTERNA**  
**EXTERNAL DIRTY SEALS**



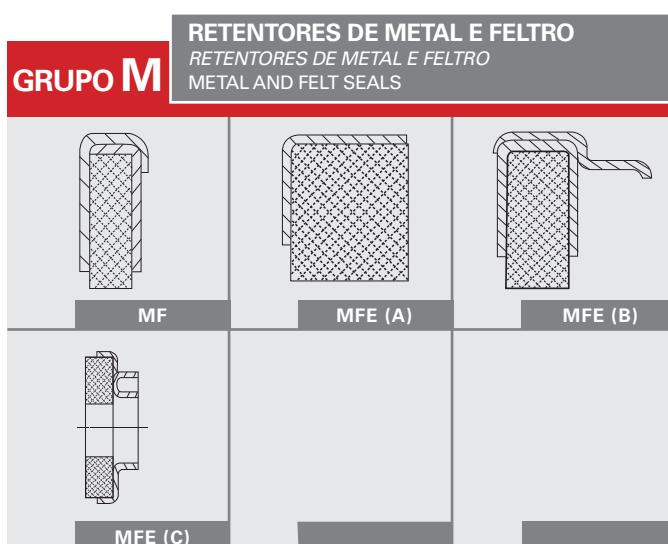
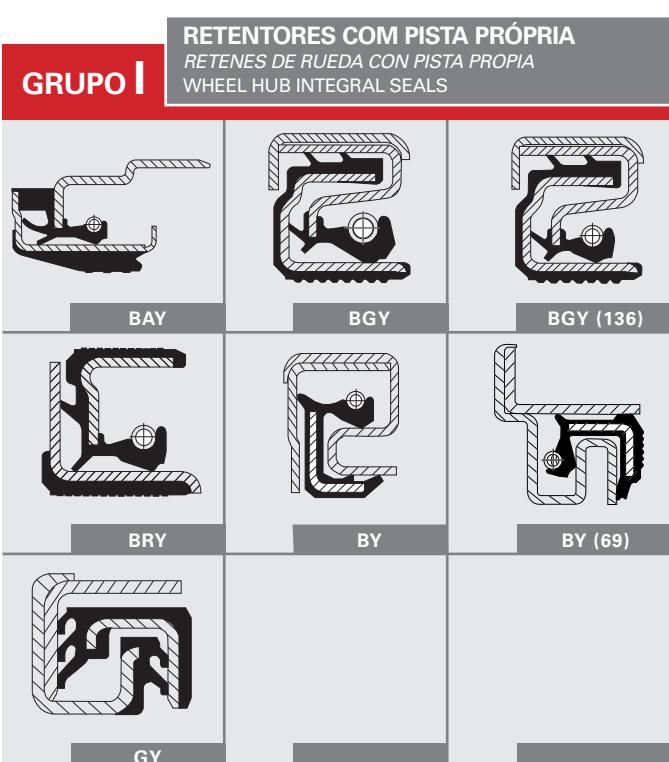
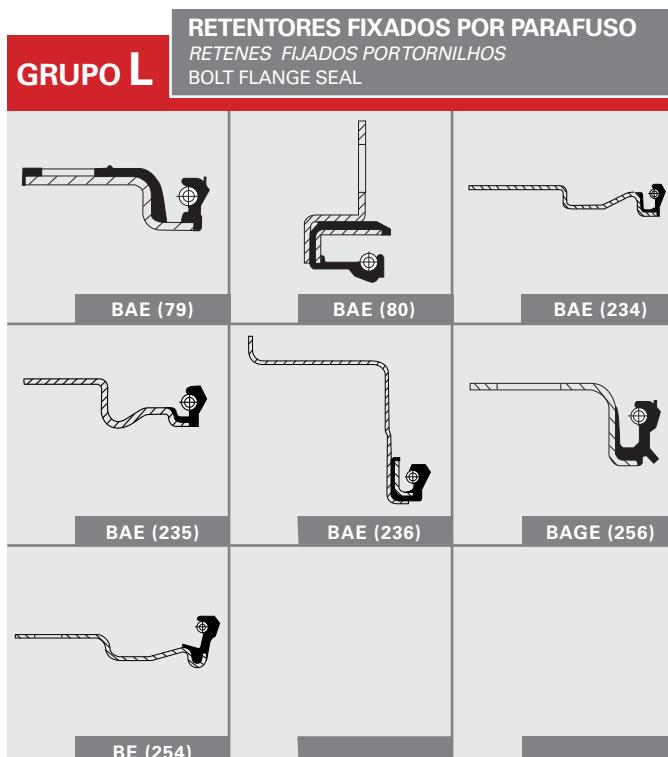
TIPOS ALTERNATIVOS / TIPOS ALTERNATIVOS / ALTERNATIVE SEAL DESIGNS

**GRUPO G**

**RETENTORES TAMPÃO**  
**TAPONES**  
**SEALING COVERS**

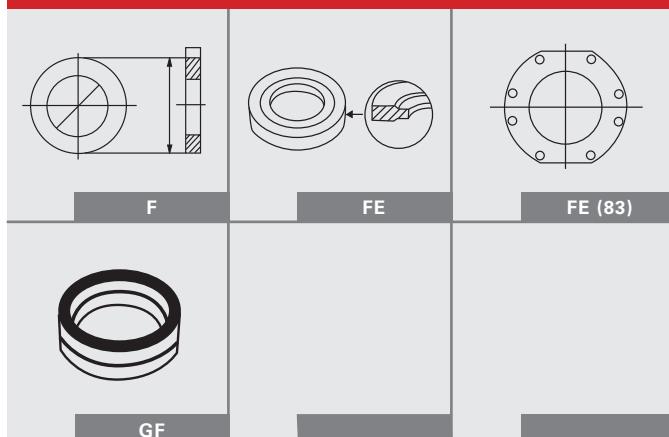


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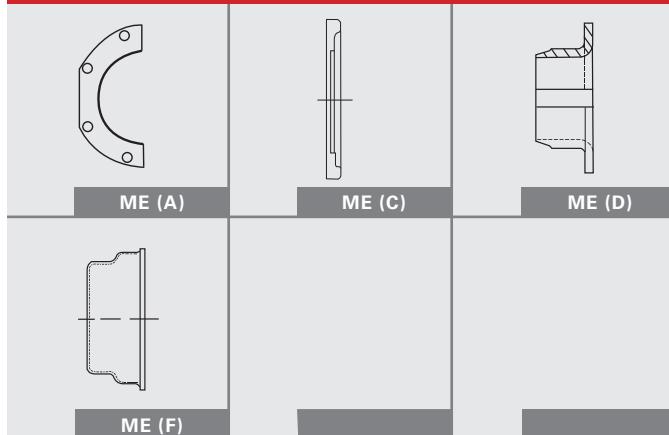


**GRUPO N**

**RETENTORES DE FELTRO**  
RETEÑES DE FIELTRO  
FELT SEALS


**GRUPO O**

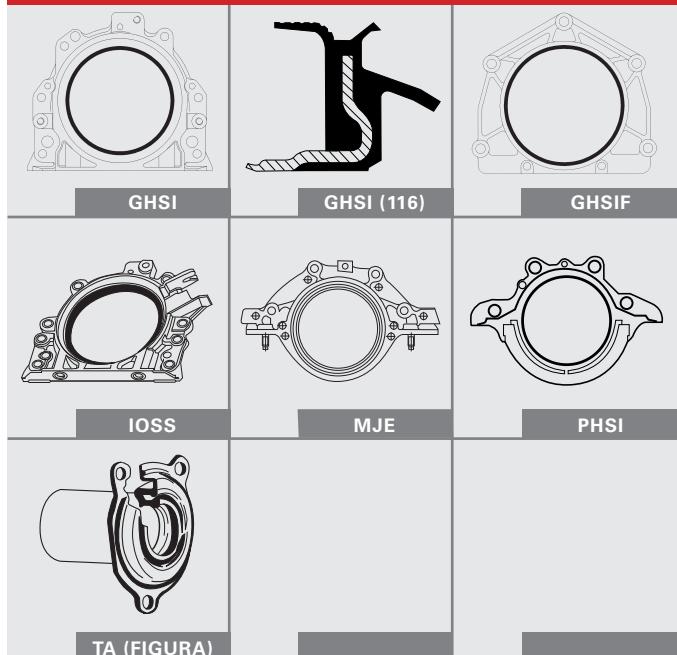
**RETENTORES ESTAMPADOS**  
RETEÑES ESTAMPADOS  
STAMPED SEAL AND SLEEVE


**GRUPO P**

**RETENTORES COM LÁBIO DE VEDAÇÃO EM PTFE**  
RETEÑES CON LABIO SELLADOR DE PTFE  
PTFE OIL SEAL


**GRUPO Q**

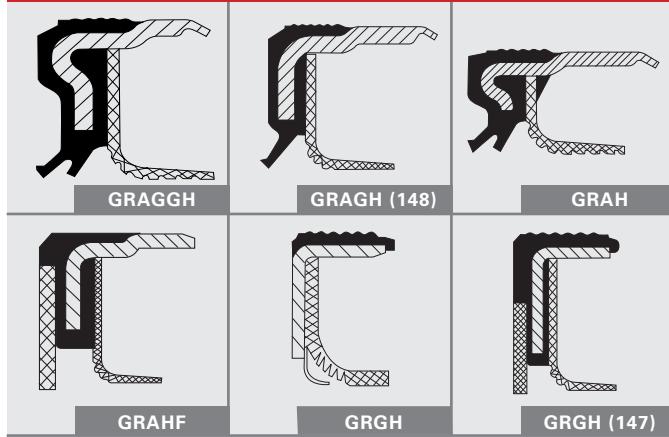
**SISTEMAS INTEGRADOS DE VEDAÇÃO**  
RETEÑES INTEGRADOS  
INTEGRATED SEALING SYSTEMS



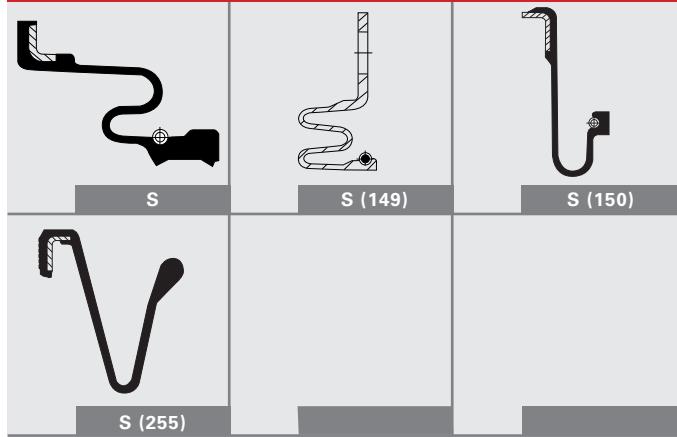
TIPOS ALTERNATIVOS / TIPOS ALTERNATIVOS / ALTERNATIVE SEAL DESIGNS

**GRUPO P**

**RETENTORES COM LÁBIO DE VEDAÇÃO EM PTFE**  
RETEÑES CON LABIO DE VEDAÇÃO EN PTFE  
RETENTORES COM LÁBIO DE VEDAÇÃO EN PTFE


**GRUPO R**

**RETENTORES TIPO "S"**  
RETEÑES TIPO "S"  
"S" TYPE OIL SEAL



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Before specifying the use of a retainer, please check for availability • 0800 7712155

## GRUPO A TIPOS ALTERNATIVOS

### TIPOS ALTERNATIVOS ALTERNATIVE SEAL DESIGNS

Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabó Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material labio Material Labio Material	Página Pagina Page
7,9	12,7	11	02964GAG	GAG (119)	LI	NBR	61
8,0	16,0	2,5	02614GRE	GRE	LI	NBR	61
8,9	16,0	7	02281BAE	BAE (146)	H	NBR	58
9,0	16,0	9/15,0	01662GAE	GAE	LI	NBR	60
9,5	15,5	5,1	07918BRE	BRE (229)	LI	NBR	59
10,0	19,0	3,4	02616GRE	GRE	LI	NBR	61
10,0	19,4	2,3/7,5	01741GE	GE (245)	LI	NBR	61
11,0	16,6	6/8,5	02239GAE	GAE (208)	LI	NBR	61
11,8	28,0	5,0/7,5	03202GAE	GAE (87)	LI	HNBR	60
12,0	28,1	8	03110BRGE	BRGE (193)	LI	NBR	60
12,0	39,5	8,6	02968GAE	GAE (209)	LI	NBR	61
12,5	28,6	9	02354GAE	GAE (209)	LI	NBR	61
14,0	20,0	2,5	02534GAG	GAG	LI	NBR	61
14,0	26,9	8,9	03113BRGH	BRGH (203)	LI	HNBR	60
14,2	28,6	13,5	02576GAG	GAG (119)	LI	NBR	61
15,0	21,0	2/14	02319BRGE	BRGE (58)	LI	NBR	60
15,0	21,0	5/6,5	07063BRAG	BRAG	LI	NBR	59
15,0	22,0	4,0	02441GRG	GRG	LI	NBR	61
15,0	24,0	6,0	07002GRG	GRG (225)	LI	HNBR	61
15,0	35,0	8,0	02683GAG	GAG	LI	NBR	60
15,0	35,0	10,0/12,7	01889GAO	GAO (244)	LI	NBR	61
15,9	28,6	9,5	00156BRO	BRO (204)	LI	NBR	60
15,9	30,0	6,0	05049BRGEF	BRGG	H	FPM	60
16,0	22,0	6,2/9,7	02928BRE	BRE (39)	LI	NBR	59
16,0	22,0	9,7	03377BRE	BRE (39)	LI	NBR	59
16,0	23,0	3,3	02875GRG	GRG	LI	NBR	61
16,0	24,0	4,0	03373GRE	GRE	LI	NBR	61
16,5	25,0	5,0	02876GRG	GRG	LI	NBR	61
16,7	35,0	6,5/8,3	02618GRG	GRG	LI	NBR	61
17,0	28,0	7/10	01837BRGE	BRGE (194)	H	NBR	60
17,0	28,0	8,0	01784BRO	BRO (205)	LI	NBR	60
17,0	28,6	6,4	00342GAG	GAG	LI	NBR	61
17,0	30,0	7,0	02963BROF	BRO	LI	FPM	60
17,0	35,0	7	03182BROF	BRO	LI	FPM	60
17,8	30,0	11	01818GAE	GAE (45)	AH	NBR	60
17,8	32,2	5,5	02216GAG	GAG	LI	NBR	61
18,0	28,0	8,0	03370GRGE	GRGE (120)	LI	NBR	62
18,0	30,0	7	03224BROF	BRO	LI	FPM	60
18,0	32,0	4,5	03322BRO	BRO	LI	***	60
18,7	34,9	8,7	00745BGO	BGO	LI	NBR	59
19,0	25,4	12,7	03365GRE	GRE (143)	LI	NBR	61
19,0	31,9	9,5	00338BGO	BGO	LI	NBR	59

Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabó Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material labio Material Labio Material	Página Pagina Page
19,0	35,0	2,2	03010GR	GR (223)	LI	NBR	61
19,9	44,4	1,6/7,9	01723BAE	BAE (161)	LI	NBR	58
20,0	26,0	4,0	02592GAG	GAG	LI	NBR	61
20,0	27,0	5,0	02700GRG	GRG	LI	NBR	61
20,0	28,0	4,0	02526GAG	GAG	LI	NBR	61
20,0	30,0	4,0	03003GRE	GRE	LI	NBR	61
20,0	30,0	4,0/7,0	01566BAO	BAO	LI	NBR	58
20,0	30,0	7,0	00505BRE	BRE (187)	LI	NBR	59
20,0	35,0	7,0/10,6	02075BREP	BRE (192)	H	ACM	59
20,0	37,0	8,0	03369GRGE	GRGE (120)	LI	NBR	62
20,0	37,0	8/11	02710GRGE	GRGE (226)	LI	NBR	62
20,0	38,1	18,3	02070BBO	BBO (180)	LI	NBR	59
20,0	40,0	6,5	01170BAE	BAE (162)	LI	NBR	58
20,0	47,0	10,0/12,7	01129GAE	GAE (207)	LI	NBR	61
20,0	47,0	10,0/12,7	01129GRO	GRO	LI	NBR	62
20,0	52,0	10,0/13	02232GAO	GAO (244)	LI	NBR	61
21,0	32,0	7,0	07134BGE	BGE	H	NBR	59
21,0	32,0	9,0	07496BGE	BGE	H	NBR	59
21,0	37,0	7,0/10,0	02143BRGGG	BRGGG	LI	NBR	60
21,5	48,0	8,4	07351BRGEP	BRGE (139)	H	ACM	60
22,0	28,0	5,0	07870GAE	GAE (208)	LI	NBR	61
22,0	31,8	6,0	02763BAE	BAE (107)	LI	NBR	58
22,0	32,0	1,9/5	02258GAE	GAE (63)	LI	NBR	60
22,0	34,8	8,0	00937BGO	BGO	LI	NBR	59
22,0	40,0	8,0	03019BRAGEP	BRAGE (185)	H	ACM	59
22,0	42,5	29,5	03060GGE	GGE (246)	LI	NBR	61
22,1	40,0	12,0/17	00224BRG	BRG (123)	H	ACM	59
22,1	40,0	12,0/17	00224BRGE	BRGE (55)	H	NBR	60
22,1	40,0	12,0/17	00224BRGE	BRGE (02)	H	NBR	59
22,2	28,0	8,0	02814GRG	GRG (09)	LI	NBR	61
22,2	29,0	6	03001GAE	GAE (209)	LI	NBR	61
22,2	35,0	8,0	00937BG	BG	LI	NBR	59
22,3	35,7	3,7/10	02132BRES	BRE (193)	H	MVQ	59
22,8	40,0	6,5/8	07137BGEPE	BGE	H	ACM	59
23,0	37,0	7,0/11,0	02967BRGE	BRGE (195)	LI	NBR	60
23,0	37,0	13,5	02467BAGFP	BAGF	BI	ACM	58
24,0	0,0	8,5	03374GAE	GAE (209)	LI	NBR	61
24,0	37,0	20,0	03270BRE	BRE	***	***	59
24,0	62,0	12	01456BRE	BRE (121)	LI	NBR	59
24,6	44,5	1,5/7,9	01722BAE	BAE (161)	LI	NBR	58
24,6	46,4	14,7	01401BB	BB	LI	NBR	58
25,0	35,0	5,0/7,0	02261GAE	GAE (210)	LI	NBR	61

## GRUPO A

### TIPOS ALTERNATIVOS

TIPOS ALTERNATIVOS  
ALTERNATIVE SEAL DESIGNS

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
25,0	35,0	7,0	02802BRGEF	BRGE	LI	FPM	59
25,0	35,0	7,0	07877GAE	GAE (208)	LI	HNBR	61
25,0	38,0	10,5/14,5	02797BRGEF	BRGE (57)	LI	FPM	60
25,0	47,0	7,0	02010BRO	BRO	LI	NBR	60
25,0	47,0	8,0	02241GRG	GRG	LI	NBR	61
25,0	47,0	8,0	03332BRGG	BRGG (202)	BI	NBR	60
25,0	52,0	2/15	02411GRG	GRG (224)	LI	NBR	61
25,0	52,0	10,0/12,7	01890GAO	GAO (244)	LI	NBR	61
25,0	62,0	10,0/13,0	02231GAO	GAO (244)	LI	NBR	61
25,4	38,0	8,0	00768BGO	BGO	LI	NBR	59
25,4	38,1	6,8/13,5	01356GAO	GAO (118)	LI	NBR	61
25,4	38,1	8,0	02172BG	BG	LI	NBR	59
25,4	44,5	14,3	00327BF	BF	LI	NBR/FE	59
25,4	50,8	15,8	01547BGO	BGO	LI	NBR	59
25,6	42,0	7,0/10,3	01765BRE	BRE (190)	BI	NBR	59
26,0	34,0	5	02259GAG	GAG (103)	LI	NBR	61
26,0	40,0	5	02856GAE	GAE (50)	LI	NBR	60
26,0	42,0	8,0	02165GRGG	GRGG	LI	NBR	62
26,0	42,0	8,0	02657BRAGG	BRAG	H	MVQ	59
26,7	32,7	4	02705GAE	GAE (209)	LI	NBR	61
27,0	35,0	2,5	05514GE	GE	LI	NBR	s/f
27,0	42,7	1,2/7,9	01724BAE	BAE (161)	LI	NBR	58
28,0	38,0	3	05183GAGE	GAGE	LI	NBR	61
28,0	40,0	8,0	02157BRO	BRO	LI	NBR	60
28,0	40,0	8,0	07591BRGHP	BRGH (203)	H	ACM	60
28,0	40,0	10,5	02094BAGE	BAGE (173)	LI	NBR	58
28,0	40,6	5	02520GAE	GAE (62)	LI	NBR	60
28,0	46,0	3,0	05139GAGE	GAGE	LI	NBR	61
28,0	52,0	6,0/9,0	02728BRGE	BRGE (04)	AH	NBR	60
28,2	45,9	0,8/5,5	05052GAGE	GAGE (215)	LI	NBR	61
28,6	57,0	13	07140GE	GE (127)	LI	NBR	61
29,0	35,0	6	02815GAE	GAE (209)	LI	NBR	61
29,5	37,0	7,5	02167GAE	GAE (49)	LI	NBR	60
29,8	42,3	29,5	03135GE	GE (52)	LI	NBR	61
29,8	50,0	10,0/13,5	07139BAGEP	BAGE (172)	H	ACM	58
29,8	50,0	10,0/13,5	07539BRAGEP	BRAGE	H	ACM	59
29,8	52,0	10,0/13,5	07138BAGEP	BAGE (172)	AH	ACM	58
29,8	52,0	10,0/13,5	07538BRAGEP	BRAGE	AH	ACM	59
29,9	42,0	7,0	02681BARGF	BARG (105)	H	NBR	58
30,0	40,0	10,0	03366BRO	BRO	LI	NBR	60
30,0	45,0	8,0	05656BREF	BRE (231)	AH	FPM	59
30,0	47,0	8,0	02966BRGG	BRGG (202)	LI	NBR	60

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
30,0	52,0	7,0	02936BRAGP	BRAG	H	ACM	59
30,0	62,0	0,9/5	03026GAE	GAE (65)	LI	NBR	60
30,0	62,9	2,5/20,2	02929BRGE	BRGE (40)	LI	NBR	60
30,0	63,2	17	03260BRGGE	BRGGE (138)	LI	NBR	60
30,0	72,0	2,5/10,5	01792BRE	BRE (189)	LI	NBR	59
30,0	72,0	6,5	02672BRG	BRG	BI	NBR	59
30,0	72,0	10,0	01581BGO	BGO	LI	NBR	59
30,0	72,3	3/20	02388GRG	GRG (224)	LI	NBR	61
30,5	38,0	7,9	01873GRE	GRE (219)	LI	NBR	61
30,7	36,7	7	02704GAE	GAE (209)	LI	NBR	61
31,0	38,0	6	03006GAE	GAE (209)	LI	NBR	61
31,0	43,0	11,0	03249BRO	BRO	LI	NBR	60
31,0	50,0	8,0	02317BRAGF	BRAG	H	FPM	59
31,0	62,1	4,0/5,5	02595BRF	BR	LI	FPM	59
31,7	44,5	1,5/5,9	02257GAE	GAE (62)	LI	NBR	60
31,8	44,5	8,0	02215BG	BG	LI	NBR	59
31,8	44,7	6,4	03245BRH	BRH	LI	NBR	60
32,0	52,6	15,5	03285BRGGE	BRGGE (125)	LI	NBR	60
33,0	46,0	11,0	03390BRO	BRO	LI	NBR	60
33,0	50,0	15,0	01834BAGE	BAGE (16)	AH	NBR	58
33,0	51,9	3/12	01849BAGE	BAGE (169)	BI	NBR	58
33,3	54,0	11,0	02242BG	BG	H	NBR	59
34,0	55,0	11,0/15,0	02152BAGGG	BAGGG	LI	NBR	58
34,5	46,5	6,5	02482GRG	GRG	LI	NBR	61
34,9	49,5	12,7	07592BAGEP	BAGE (06)	AH	ACM	58
35,0	41,0	6,0	07689BRE	BRE (39)	LI	NBR	59
35,0	45,2	15/24	02336BROE	BROE	LI	NBR	60
35,0	45,6	2,5/5,6	01323GAE	GAE (46)	LI	NBR	60
35,0	48,0	11,0	03248BRO	BRO	LI	NBR	60
35,0	48,2	5/14,4	02711GRGE	GRGE	LI	NBR	61
35,0	48,5	5,0/7,0	02903GRO	GRO (247)	LI	NBR	62
35,0	50,0	7/12,4	01896BRE	BRE (190)	H	NBR	59
35,0	54,0	10	07401BRAGE	BRAGE	BI	ACM	59
35,0	54,0	10,0/15,0	02370BRAGE	BRAGE	BI	NBR	59
35,0	54,0	14,7	07399BAGEF	BAGE (61)	BI	FPM	58
35,0	54,9	0,7/14,7	02374BAGE	BAGE (61)	BI	NBR	58
35,0	54,9	9/14,7	02836BAGEF	BAGE (61)	BI	FPM	58
35,0	65,0	8,0	02481BRAGF	BRAG	BI	FPM	58
35,6	50,8	7,8/9,6	02528GRL	GRL	LI	NBR	62
36,0	54,0	8,0	03273GRO	GRO	***	***	62
36,6	52,4	8,0	05167BRAF	BRAGE (137)	H	FPM	59
37,0	45,0	12	02707GAE	GAE (209)	LI	NBR	61

TIPOS ALTERNATIVOS / TIPOS ALTERNATIVOS / ALTERNATIVE SEAL DESIGNS

Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.

Before specifying the use of a retainer, please check for availability • 0800 7712155

## GRUPO A TIPOS ALTERNATIVOS

TIPOS ALTERNATIVOS  
ALTERNATIVE SEAL DESIGNS

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Lábio Material	Página Pagina Page
37,0	50,0	11,0	03392BRO	BRO	LI	NBR	60
38,0	50,0	8,0	02794BRAGF	BRAG	H	FPM	59
38,0	50,0	10,0/16,0	00954BAE	BAE (163)	LI	NBR	58
38,0	52,0	2,5/8,5	01850BRGE	BRGE (196)	LI	NBR	60
38,0	52,0	3,6/9	01219BRGE	BRGE (197)	LI	NBR	60
38,0	50,4	11,0	02565BGF	BG	H	FPM	59
38,0	60,2	18,5	07406BRAGE	BRAGE (155)	AH	ACM	59
38,1	50,4	10,9	00183BAG	BAG	LI	NBR	58
38,1	50,4	11	01803GGO	GGO	LI	NBR	61
38,1	54,1	12,7	07745BAGEP	BAGE (102)	AH	ACM	58
38,1	57,1	11,0	00254BAO	BAO (178)	LI	NBR	58
38,1	60,3	12,7/15,9	07199BAGEP	BAGE (176)	AH	ACM	58
38,1	60,3	12,7	00049BAGE	BAGE (16)	AH	NBR	58
38,1	63,5	19,0	01033BB	BB	LI	NBR	58
38,5	45,6	8/14,7	02071BRGE	BRGE (56)	LI	NBR	60
39,4	60,3	12,7	01997BRO	BRO	LI	NBR	60
39,4	69,9	6,4/16,2	01897BRGEP	BRGE	H	ACM	59
39,4	80,1	6,4/16,2	02155BRGE	BRGE (198)	AH	NBR	60
39,4	80,2	6,4/11,8	01660BAGE	BAGE (239)	H	NBR	58
39,4	80,3	6,4/16,2	01898BRGEP	BRGE	H	ACM	59
39,5	54,5	3/16	01276GRE	GRE (220)	LI	NBR	61
39,7	68,2	11,1	00871BGO	BGO	LI	NBR	59
39,7	80,2	6,4/15,0	00029BAE	BAE (15)	LI	NBR	58
40,0	50,0	5,0	02469GRG	GRG	LI	NBR	61
40,0	52,0	2,8/8,5	02212BRGE	BRGE (196)	LI	NBR	60
40,0	52,0	7,0	01988BAGE	BAGE (171)	LI	NBR	58
40,0	52,0	9	07224BRAGGP	BRAGG	BI	ACM	59
40,0	55,0	6,0	07683GAG	GAG (243)	LI	NBR	61
40,0	55,0	8,0	02911BRAGP	BRAG	AH	ACM	59
40,0	55,0	8,8	02859BRGH	BRGH (203)	LI	NBR/FPM/NY	60
40,0	56,0	7,0	02844BRAGF	BRAG	H	FPM	59
40,0	56,0	7,0	02893BRAGP	BRAG	H	ACM	59
40,0	60,0	10,0/11,5	02741BRGGP	BRGG	BI	ACM	60
40,0	62,0	12,0	01684BRGGG	BRGGG	LI	NBR	60
40,0	62,0	12,0	02377BG	BG	LI	NBR	59
40,0	65,0	12,0	02088BGO	BGO	BI	NBR	59
40,0	66,0	7,0	07387GAE	GAE (164)	LI	NBR	61
40,0	69,0	15,4	07634BRXE	BRXE	BI	NBR	60
40,0	69,0	15,4	07635GRA	GRA (153)	LI	NBR	61
40,0	70,0	7/13	07481BRABGEF	BRABGE	BI	FPM	59
40,0	75,0	12,0	07696BRGE	BRGE (124)	H	ACM	60
40,0	90,2	3/20	02410GRG	GRG (224)	LI	NBR	61

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Lábio Material	Página Pagina Page
40,1	52,0	1,9/7,7	01988BRGE	BRGE (199)	LI	NBR	60
40,1	52,0	3,5/9	00979BRGE	BRGE (196)	LI	NBR	60
41,0	54,0	11,0	03391BRO	BRO	LI	NBR	60
41,0	73,0	13,0	02737GB	GB	LI	NBR	61
41,1	62,0	16,0	00626BGO	BGO	LI	NBR	59
41,1	62,1	16,0	02027BGO	BGO	H	NBR	59
42,0	55,0	10,0	02682BRAGF	BRAG	AH	FPM	59
42,0	72,0	10,0	07500BRAGEF	BRAGE (230)	H	FPM	60
42,9	65,0	9,5/15,0	01899BRGE	BRGE (12)	BI	NBR	60
42,9	73,0	15,9	01996BRO	BRO	LI	NBR	60
43,3	56,2	15/9	01943BAGEP	BAGE (115)	H	ACM	58
43,7	71,9	9,0/21,6	00022BAE	BAE (165)	LI	NBR	58
43,7	72,1	9,0/21,6	00023BAE	BAE (166)	LI	NBR	58
44,0	65,0	2,5/12,2	01918BRGE	BRGE (200)	LI	NBR	60
44,2	71,4	10,0/16,5	02910BAGE	BAGE (172)	H	NBR	58
44,4	54,0	8,6	01858BAGE	BAGE (173)	LI	NBR	58
44,5	57,1	10,9	01575GGO	GGO (218)	LI	NBR	61
44,5	59,3	6,0	01756GGO	GGO (218)	LI	NBR	61
44,5	85,6	16,0	00695GB	GB	LI	NBR	61
44,5	73,0	12,7	02880BG	BG	LI	NBR	59
44,7	61,2	8,8	02862BRAGF	BRAG	H	FPM	59
44,8	61,3	2,7/12	00097BRE	BRE (191)	LI	NBR	59
45,0	58,3	5/18	01289GRE	GRE (220)	LI	NBR	61
45,0	61,9	5,5/10	02368GAE	GAE (211)	LI	NBR	61
45,0	65,0	6,0/7,0	02905BRGG	BRGG (202)	LI	NBR	60
45,0	72,0	9,5	07858BAGEP	BAGE (172)	H	ACM	58
45,0	73,1	13,0	02395BAGG	BAGG	BI	NBR	58
45,1	65,0	8,2	07077GRE	GRE (106)	LI	NBR	61
46,0	65,5	7/8,5	01764BAGG	BAGG	LI	NBR	58
46,0	65,5	9,0/13,2	01111BRGE	BRGE (201)	LI	NBR	60
46,0	76,2	9,5/12,7	01049BRE	BRE (241)	LI	NBR	59
46,3	66,6	0,8/6,7	02305BAG	BAG (130)	BI	NBR	58
46,8	69,8	12,0	07868BAGGEF	BAGGE (60)	H	FPM	58
47,0	58,0	7,0	02024BRGG	BRGG (202)	LI	NBR	60
47,0	60,0	7,0	02965BRGG	BRGG (202)	LI	NBR	60
47,0	63,0	5,6/11,2	02581GAE	GAE (64)	LI	NBR	61
47,6	63,7	10,0	07851BAGE	BAGE (129)	H	ACM	58
47,6	68,0	10,4	02960BAGEP	BAGE (60)	H	ACM	58
47,6	68,0	14	02516BRGE	BRGE (154)	LI	ACM	60
47,6	70,7	16,7	00092BGOE	BGOE (185)	LI	NBR	59
47,6	80,0	13,0/26,0	02209BAGE	BAGE (174)	BI	NBR	58

## GRUPO A

### TIPOS ALTERNATIVOS

TIPOS ALTERNATIVOS  
ALTERNATIVE SEAL DESIGNS

Diâmetro Eixo Shaft Diameter	Diâmetro Alojamento Bore Diameter	Altura Retentor Width	Número Sabó Sabo Number	Tipo (Figura) Type (Figure)	Orientação Orientation Direction of Rotation	Material lâbio Material Labio Material	Página Page
47,6	80,3	6,5/16,5	02201BRGE	BRGE (14)	H	ACM	60
47,7	73,1	9,5	07701BARG	BARG (105)	BI	NBR	58
47,7	73,1	17,5	07395BRAGGG	BRAGGG (133)	BI	NBR	59
47,8	60,9	6,4	00220BAE	BAE (161)	LI	NBR	58
48,0	65,0	12,0	01840BGO	BGO	AH	NBR	59
48,0	65,5	7,0	02833BAGG	BAGG	LI	NBR	58
48,0	77,0	7,7	07075GRE	GRE (152)	LI	NBR	61
48,7	58,0	8,5	03275GAO	GAO (244)	***	***	61
49,0	76,0	17,4	01199GB	GB	LI	NBR	61
49,1	67,3	7,5	02724BRGP	BRG (122)	LI	ACM	59
49,2	63,5	1,5/74	01881GOE	GOE	LI	NBR	61
49,2	80,1	22,2	00078BAE	BAE (166)	LI	NBR	58
50,0	65,0	9,0	02818BRAGF	BRAG	H	FPM	59
50,0	65,0	10,0	07459BRGGF	BRGG	***	FPM	60
50,0	65,0	14,0	02442BAGE	BAGE (172)	BI	NBR	58
50,0	80,0	12,0	02547BRO	BRO	LI	NBR	60
50,0	81,0	18,0/53,0	01077BBOE	BBOE	LI	NBR	59
50,0	117,5	23,2	02435GRG	GRG	LI	NBR	61
50,8	58,8	3,6/4,6	02819GAE	GAE (62)	LI	NBR	60
50,8	81,0	11,9	00274BGO	BGO	LI	NBR	59
51,0	65,0	7,0	02777BRAS	BRA	H	MVQ	59
52,0	59,0	7	03002GAE	GAE (209)	LI	NBR	61
52,4	76,2	7,9	00974GAO	GAO (216)	LI	NBR	61
54,0	77,8	19,0	01012BGO	BGO	LI	NBR	59
54,0	79,4	9,5	02287BGP	BG	BI	ACM	59
54,0	79,4	12,7/19,0	02393BAGE	BAGE (172)	AH	NBR	58
54,0	79,4	12,7	00436BAGE	BAGE (172)	H	NBR	58
54,0	80,0	11,1/16,6	02693BRGE	BRGE (12)	BI	NBR	60
54,0	81,1	20,7	01933BABEP	BABE (54)	BI	ACM	58
54,0	81,1	22,9	01008BAGEP	BAGE (41)	LI	ACM	58
55,0	70,0	6,0/10,3	02392BRGE	BRGE (13)	BI	NBR	60
55,0	70,0	8,5	07818BRGGP	BRGG	BI	ACM	60
55,0	70,1	8,0	02656BRAF	BRA	AH	FPM	59
56,0	63,2	11	02706GAE	GAE (209)	LI	NBR	61
57,2	82,5	9,5/11,5	02103BAGE	BAGE (227)	AH	NBR	58
57,2	82,5	12,0	07262BAGGP	BAGG (145)	AH	ACM	58
57,2	82,6	0,9/14	02512BRGE	BRGE (67)	AH	NBR/ACM	60
57,2	82,6	14	07095BRGE	BRGE (67)	AH	ACM	60
57,2	92,0	18,0	00014BGO	BGO	LI	NBR	59
57,5	74,0	8,5	05413GRGG	GRGG	LI	NBR	62
58,0	80,0	4,5/10,5	02996BRGE	BRGE (13)	H	ACM	60
59,0	79,7	9,7/11,8	01932GRE	GRE (221)	LI	NBR	61

TIPOS ALTERNATIVOS / TIPOS ALTERNATIVOS / ALTERNATIVE SEAL DESIGNS

Antes de especificar a utilização de um retentor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.  
Before specifying the use of a retainer, please check for availability • 0800 7712155

## GRUPO A TIPOS ALTERNATIVOS

TIPOS ALTERNATIVOS  
ALTERNATIVE SEAL DESIGNS

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
72,0	85,5	8,0	07616BAGE	BAGE (126)	BI	NBR	58
72,0	85,5	18,0	07716BAGE	BAGE (237)	BI	NBR	58
73,0	98,5	11,0	07552BAGE	BAGE (60)	BI	NBR	58
73,0	101,6	11,5	00421BAGG	BAGG	BI	NBR	58
73,0	101,6	18,3	02036GB	GB (217)	LI	NBR	61
73,0	101,7	17,4	01091GB	GB	LI	NBR	61
73,0	104,7	9,6/20,6	00181BE	BE (240)	LI	NBR	59
73,5	95,0	18,0	02017GB	GB	LI	NBR	61
74,6	101,6	17,4	00323BGO	BGO	LI	NBR	59
75,0	100,0	13,0	02226BG	BG	BI	NBR	59
76,2	101,6	19,0	00377BB	BB	LI	NBR	58
76,2	101,7	11,0	02127BGP	BG	H	ACM	59
76,3	125,4	16,5	02687BRGE	BRGE (67)	BI	NBR/ACM	60
77,0	98,5	8,5	08318GRE	GRE (128)	LI	NBR	61
77,0	100,1	11,5	02345BRAGF	BRAG	AH	FPM	59
78,0	100,1	12,0	02871BRAGF	BRAG	H	FPM	59
79,0	110,0	17,4	02035GB	GB	LI	NBR	61
79,4	115,9	10,1/30,5	00003BE	BE(18)	LI	NBR	59
80,0	100,0	13,0	00504BGO	BGO	LI	NBR	59
80,0	112,0	12,0/18,0	02351BAGE	BAGE (172)	H	NBR	58
81,0	117,5	14,5/19,0	00001BE	BE(19)	LI	NBR	59
82,5	107,9	11,9	00644BGO	BGO	LI	NBR	59
82,5	107,9	16	07099GRE	GRE (151)	LI	NBR	61
82,5	114,3	12,7	01923BG	BG	BI	NBR	59
82,5	114,3	12,7	01923BGG	BGG	BI	NBR	59
82,6	107,9	16,0	01571BBR	BBR (183)	LI	NBR	59
82,6	134,6	41,2	02019BAGE	BAGE (42)	LI	NBR	58
82,6	134,6	41,2	02805BAGE	BAGE (42)	LI	NBR	58
85,0	105,0	12,0	02925BRAGF	BRAG	AH	FPM	59
85,0	145,0	37,0	07475BRABGE	BRABGE (131)	BI	FPM/NBR	59
85,7	108,0	7,9/14,6	01900GAE	GAE (214)	LI	NBR	61
86,0	99,0	6,7	07686GAE	GAE (117)	LI	NBR	60
87,3	114,3	22,2	01791BF	BF	LI	NBR/FE	59
88,9	115,4	16,2/19,2	02483BGE	BGE (184)	BI	NBR	59
88,9	115,4	16,2/19,2	07414BGE	BGE (184)	BI	NBR	59
88,9	123,0	18,7/21,7	02484BGE	BGE (184)	BI	NBR	59
88,9	123,0	18,7/21,7	07415BGE	BGE (184)	BI	NBR	059
88,9	152,4	30,4	02804BAGE	BAGE (42)	LI	NBR	58
88,9	152,4	39,1	02018BAGE	BAGE (42)	LI	NBR	58
89,0	111,1	12,7	00577BGOP	BGO	LI	ACM	59
89,0	114,3	12,7	02424BG	BG	LI	NBR	59
90,0	104,0	11,0	02600BRAGF	BRAG	AH	FPM	59

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
90,0	104,0	11,0	02900BRAGF	BRAG	AH	FPM	59
90,0	115,0	4,1/13	02997BRGE	BRGE	AH	ACM	59
91,0	111,0	10,0	02629BRAGF	BRAG	AH	FPM	59
92,0	123,8	15,0/19	00018BE	BE	LI	NBR	59
92,1	123,9	21,0	01251BGO	BGO	LI	NBR	59
92,2	123,9	19,0	02037GB	GB (217)	LI	NBR	61
94,7	120,0	12,0	02464BRO	BRO	LI	NBR	60
95,0	120,0	15,0	07920BGE	BGE (100)	BI	NBR	59
95,3	114,3	12,0	02125BGP	BG	AH	ACM	59
97,8	116,0	16,0	02060GB	GB	LI	NBR	61
100,0	120,0	13,0	02049BG	BG	BI	NBR	59
100,0	120,0	13,0	02049BG	BG	BI	NBR	59
100,0	128,0	15,25	01805BE	BE (240)	LI	NBR	59
101,6	127,0	16,0	02194GB	GB	LI	NBR	61
101,6	139,8	14,3	01252BGO	BGO	LI	NBR	59
101,8	127,1	11,9	01901BGO	BGO	LI	NBR	59
104,8	139,6	14,3	00744BBO	BBO (182)	LI	NBR	59
105,0	130,0	12,0	02696BRAGF	BRAG	H	FPM	59
108,0	133,3	9,5	01103GB	GB	LI	NBR	61
108,0	133,4	12,0	02386BG	BG	BI	NBR	59
109,7	140,0	12,40	01941GAE	GAE (47)	LI	NBR	60
110,0	130,0	13,0	02973BRAGF	BRAG	AH	FPM	59
110,0	140,0	13,0	00516BG	BG	BI	NBR	59
110,0	140,0	13,0	07919BGE	BGE (100)	BI	NBR	59
111,3	142,8	4,8	01132GR	GR	LI	NBR	s/f
112,5	130,0	11,0	02619BRAGF	BRAG	AH	FPM	59
114,3	155,6	14,0	02180BG	BG	BI	NBR	59
117,4	157,1	13,5/26,5	02134BGE	BGE (184)	BI	NBR	59
117,5	146,0	14,3	02092BGO	BGO	BI	NBR	59
120,0	145,0	15,0	01884BG	BG	BI	NBR	59
125,0	150,0	12,0	02770BB	BB (10)	LI	NBR	59
125,0	150,0	15,0	01735BE	BE	LI	NBR	58
125,0	150,0	15,0	01735BG	BG	BI	NBR	59
125,0	150,0	31,7	02545BROF	BRO	BI	FPM	60
130,0	160,0	12,0	02872BRAGF	BRAG	AH	FPM	59
136,5	168,3	15,9	00649BGO	BGO	LI	NBR	59
138,0	184,0	12,38	01925GRE	GRE (43)	LI	NBR	61
139,7	160,3	31,7	02089BGOE	BGOE	LI	NBR	59
140,0	164,0	20,0	08314BGEF	BGE (135)	BI	FPM	59
140,0	165,0	13	02983BRO	BRO	BI	NBR	60
145,0	170,0	11,3	07462BAEF	BAE (134)	LI	FPM	58

**GRUPO A**  
**TIPOS ALTERNATIVOS**  
**TIPOS ALTERNATIVOS**  
**ALTERNATIVE SEAL DESIGNS**

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
145,0	170,0	15,0	07281BAGE	BAGE (168)	LI	NBR	58
145,0	175,0	17,0	07959BRAGEF	BRAGE (104)	BI	FPM	59
149,2	181,0	12,7	00211BGO	BGO	LI	NBR	59
150,0	180,0	15,0	02771BB	BB (10)	LI	NBR	59
155,0	180,0	16/29	02219BAGF	BAG (17)	BI	FPM	58

**GRUPO B**  
**RETENTORES PARA SISTEMAS HIDRÁULICOS**  
**RETENES Y GUARNICIONES PARA SISTEMAS HIDRAULICOS**  
**HIDRAULIC SYSTEMS SEALS**

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
8,0	14,0	4,0	05078U	U	LI	FPM	s/f
12,0	22,0	7,6	03052U	U (A)	LI	NBR	62
12,3	18,6	2,5		U	LI	NBR	s/f
14,0	21,0	4,2	05190U	U (A)	LI	FPM	62
14,0	23,2	3,2	03156U	U		NBR	s/f
15,0	21,5	3,2	03150U	U	LI	NBR	s/f
16,0	22,0	6,0	07118U	U (A)	LI	NBR	62
16,0	27,0	7,5	03072U	U (B)	LI	NBR	62
20,0	29,0	6,0	03207NEH	NEH	LI	NBR	62
22,0	32,0	8,0	02002U	U (B)	LI	NBR	62
22,2	28,6	6,5	03029NEH	NEH		NBR/PTFE	62
25,0	32,0	9,0		U (B)	LI	NBR	62
25,0	32,0	9,0	03102U	U (B)	LI	NBR	62
28,0	38,0	8,0	03103U	U (B)	LI	NBR	62
30,0	39,0	4,8	03053U	U (C)	LI	NBR	62
31,0	47,0	12,0	01975U	U (B)	LI	NBR	62
31,7	42,2	4,2	09807GRE	GRE (250)	LI	NBR	62
31,8	38,1	6,2	03186NEH	NEH	LI	FPM	62
36,0	52,0	12,0	03067U	U (B)	LI	NBR	62
41,0	57,0	9,5	03071U	U (B)	LI	NBR	62
44,0	60,0	12,0	03101U	U (B)	LI	NBR	62
54,0	70,0	12,0	03056U	U (B)	LI	NBR	62
62,0	70,0	9,0	03063U	U (B)	LI	NBR	62
157,0	170,3	19,5	03036U	U	LI	NBR	s/f

**GRUPO C**  
**RETENTORES PARA MOVIMENTO AXIAL**  
**REtenES PARA MOVIMENTO AXIAL**  
**AXIAL MOVIMENT SEALS**

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page	
8,0			02532BRGE	BRGE (21)	LI	NBR	62	
12,0		27,0	4,0	02904GAE	GAE (242)	LI	NBR	62
15,0		25,0	8,1/19	00344BE	BAGE (144)	LI	NBR	62
15,5		28,0	6/15	02420BAGE	BAGE (26)	LI	NBR	62
16,0		26,0	20,0	02008BAGE	BAGE (144)	LI	NBR	62
17,0		39,7	3,3	02432GR	GR (248)	LI	NBR	62
17,0		40,0	4,6	03281GR	GR (249)	LI	NBR	62
20,0		35,0	11,0	02022GRGGO	GRGGO	LI	NBR	62
22,0		35,0	35,2/8	03347GRGGO	GRGGO	LI	NBR	62
22,0		35,6	3,5	09845BRGE	BRE (228)	LI	NBR	62
23,3		29,7	1,8/4,3	03009BREF	BRE (228)	LI	FPM	62
27,0		33,0	4,0	02703GAE	GAE (242)	LI	NBR	62
27,0		39,0	10,5	02312BRGE	BRGE (21)	LI	NBR	62
28,5		39,8	8	02461BRGE	BRGE (21)	LI	NBR	62
30,0		40,5	10,5	02318BRGE	BRGE (21)	LI	NBR	62
30,0		42,0	8,0	02023GRGGO	GRGGO	LI	NBR	62
35,0		48,0	10,5	02353BRGE	BRGE (21)	LI	NBR	62

**GRUPO D**  
**PISTAS PARA RETENTORES**  
**PISTA PARA EL RETEN**  
**SLEEVE**

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page	
31,7		42,2	4,2	09807GRE	GRE (250)	LI	NBR	s/f
35,0		40,0	26,0	02328GE	GE	LI	NBR	62
35,0		46,0	21,0	01893GE	GE	LI	NBR	62
50,8		58,0	11,5	01064MV	MV (s/f)	LI	PH	s/f
52,4		61,2	11,5	01796MA	MA (s/f)	LI	PA	s/f

TIPOS ALTERNATIVOS / TIPOS ALTERNATIVOS / ALTERNATIVE SEAL DESIGNS

Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.  
Before specifying the use of a retainer, please check for availability • 0800 7712155

## GRUPO E RETENTORES PARA HASTES DE VÁLVULAS

RETIENES PARA GUIA DE VAVULAS  
VALVE STEAM SEALS

Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
5,0	7,8	15,5	09264BREF	BRE (91)	LI	FPM	63
5,0	8,5	6,6/8,2	09283NEF	NE	LI	FPM	63
5,5	9,2	7/8	02307NEP	NE (34)	LI	ACM	63
5,5	9,2	7/8	09266NEF	NE (34)	LI	FPM	63
6,0	8,8	10	09267BREF	BRE (101)	LI	FPM	63
6,0	8,8	12,2	09203BREF	BRE (101)	LI	FPM	63
6,0	10,3	16	09259BREF	BRE (91)	LI	FPM	63
6,0	11,0	17,8	09250BREF	BRE (91)	LI	FPM	63
6,0	12,0	19,4	09260BREF	BRE (91)	LI	FPM	63
7,0	9,8	9,6/10	03044BREF	BRE (101)	LI	FPM	63
7,0	10,9	6,2/9,5	02919BREF	BRE (108)	LI	FPM	63
7,0	10,9	6,4/11	02382BREP	BRE (32)	LI	ACM	63
7,0	10,9	9,5	09251BREF	BRE (108)	LI	FPM	63
7,0	11,0	7	02509BREF	BRE (108)	LI	FPM	63
7,0	11,0	7/10	09255BREF	BRE (108)	LI	FPM	63
7,0	11,0	7/10,2	09228BREF	BRE (101)	LI	FPM	63
7,0	11,0	10,2	09239BREF	BRE (101)	LI	FPM	63
7,0	11,8	10	09261BAEF	BAE	LI	FPM	63
7,9	13,5	11,7	09241NE	NE (233)	LI	MVQ	63
7,9	14,0	12,6	09286NOF	NO (112)	LI	FPM	63
8,0	10,8	6,2/10,3	09217BREF	BRE (108)	LI	FPM	63
8,0	10,8	10,3	02544BREF	BRE (108)	LI	FPM	63
8,0	10,8	10,4	09244BREF	BRE (101)	LI	FPM	63
8,0	10,8	10,4	09245BREF	BRE (101)	LI	FPM	63
8,0	11,5	7/9,5	09222BREF	BRE (108)	LI	FPM	63
8,0	12,0	7	09272BRE	BRE (101)	LI	FPM	63
8,0	12,0	7/11	02396BREF	BRE (108)	LI	FPM	63
8,0	12,0	7/11	09242BREF	BRE (101)	LI	FPM	63
8,0	12,0	7/11	09284BREF	BRE (108)	LI	FPM	63
8,0	12,0	9,5	09254BREF	BRE (101)	LI	FPM	63
8,0	12,7	7,6/11	02969BREF	BRE (107)	LI	FPM	63
8,0	13,0	7,5/9,3	02327BREP	BRE (109)	LI	ACM	63
8,0	13,0	10	09262BAEF	BAE	LI	FPM	63
8,0	14,0	8	09212BAEF	BAE	LI	FPM	63
8,0	14,1	7,1/10,4	02097BREP	BRE (109)	LI	ACM	63
8,0	14,1	7,1/10,4	02118BREP	BRE (113)	LI	ACM	63
8,0	14,1	13,8/13	02400BREF	BRE (111)	LI	FPM	63
8,1	12,0	7,6/11	02971BREF	BRE (108)	LI	FPM	63
8,1	13,0	13,5	09224BREF	BRE (107)	LI	FPM	63
8,5	14,1	13,5	09271BAEF	BAE	LI	FPM	63
8,6	13,5	11,4	09208NE	NE (233)	LI	MVQ	63
8,7	12,5	10	09223BREF	BRE (108)	LI	FPM	63

Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page	
8,7	12,7	12,7	12,12/11	02926BREF	BRE (107)	LI	FPM	63
8,7	13,5	7,6/11	02927BREF	BRE (107)	LI	FPM	63	
8,7	15,9	16,2	02882NE	NE (233)	LI	MVQ	63	
8,8	14,3	11	09210BREF	BRE (107)	LI	FPM	63	
9,0	12,0	7	09237BREF	BRE (101)	LI	FPM	63	
9,0	13,0	10	09211BAEF	BAE	LI	FPM	63	
9,0	15,0	14	01815BAEP	BAE	LI	ACM	63	
9,0	19,0	15,14	09235BREF	BRE (110)	LI	FPM	63	
9,4	16,0	28,1	09285BREF	BRE (91)	LI	FPM	63	
9,5	13,5	11,4	09280NES	NE (233)	LI	MVQ	63	
9,5	14,3	10,7/14,3	02590NF	N (114)	LI	FPM	63	
9,5	14,3	13,68/11	02970BREF	BRE (107)	LI	FPM	63	
9,5	14,4	9,1/13,2	03045BREF	BRE (111)	LI	FPM	63	
9,5	15,9	8,2/12,6	02513BREF	BRE (107)	LI	FPM	63	
9,6	12,7	7,6	09249BREF	BRE (107)	LI	FPM	63	
9,7	13,6	12,4/14,6	02888NE	NE (233)	LI	MVQ	63	
9,9	14,3	13,1/14,5	02663NF	N	LI	FPM	63	
9,9	15,0	10/14	01924BAEP	BAE	LI	ACM	63	
10,0	12,8	6,3/10,2	09282BAEF	BRE (101)	LI	FPM	63	
10,0	19,0	15,14	09236BREF	BRE (110)	LI	FPM	63	
10,2	14,3	13,1/14,5	02674NF	N	LI	FPM	63	
11,0	14,0	10/14	09205BREF	BRE (101)	LI	FPM	63	
11,0	17,0	8,7/12	01797NOP	NO (112)	LI	ACM	63	
12,0	16,2	10/14,2	02786BREF	BRE (107)	LI	FPM	63	

## GRUPO F RETENTORES PARA VEDAÇÃO EXTERNA

RETIENES PARA RETENCION EXTERNA  
EXTERNAL DIRTY SEALS

Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
5,0	35,0	14	01102NXE	NXE	LI	NBR	63
8,0	35,0	13	02380BRXE	BRXE (252)	LI	NBR	63
8,0	35,0	16	01826BRXE	BRXE (35)	LI	NBR	63
12,0	18,0	8	07390GRAGX	GRAGX	LI	NBR	63
14,7	22,1	7	01978GROX	GROX	LI	NBR	63
16,0	35,0	12	00510BRX	BRX	LI	NBR	63
17,0	40,0	11	01799BRX	BRX	LI	NBR	63
20,9	30,1	12	01876GRXE	GRXE	LI	NBR	63
22,0	45,0	12	01089BRX	BRX	LI	NBR	63

## GRUPO F RETENTORES PARA VEDAÇÃO EXTERNA

RETIENES PARA RETENCION EXTERNA  
EXTERNAL DIRTY SEALS

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
24,0	36,0	6,0	07613BRE	BRE (s/f)	LI	NBR	63
39,7	68,2	13	01678GRX	GRX (s/f)	LI	NBR	63
46,0	65,6	11,1	01546GRX	GRX	LI	NBR	63
48,0	80,0	13	02274BRX	BRX	LI	NBR	63
50,0	65,1	12	02518BRXE	BRXE (36)	LI	NBR	63
50,0	80,5	8,4	07786GGGX	GGGX	LI	NBR	63
52,4	74,7	8,4	02026GGGX	GGGX	LI	NBR	63
55,0	70,0	12	02517BRXE	BRXE (36)	LI	NBR	63
57,0	85,0	13	02673BRX	BRX	LI	NBR	63
74,5	80,1	22	01874BRXE	BRXE (251)	LI	NBR	63
82,5	114,3	14,3	01185BAX	BAX	LI	NBR	63
143,0	150,0	27	01090BRXE	BRXE (251)	LI	NBR	63
143,0	150,0	27	01090JOGO	JOGO (s/f)	LI	NBR	63
143,0	150,0	39,5	01806BRXE	BRXE (s/f)	LI	NBR	63

## GRUPO H ARRUELAS PARA VEDAÇÃO

ARANDELAS DE RETENCION  
SEALING WASHERS

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
8,3		1,5/1,9	05080G	G (253)		NBR	64
8,7		0,9/1,6	05056G	G (253)		NBR	64
10,7		1,5/2,5	01747G	G (253)		NBR	64
14,9		2,1/2,9	01990G	G (253)		NBR	64
17,5		1,6	05060G	G (253)		NBR	64
27,0		2,5/3,3	01991G	G (253)		NBR	64

## GRUPO G RETENTORES TAMPÃO

TAPONES  
SEALING COVERS

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
	16,0	7		MR (C)		NBR	63
	20,0	4	07198MR	MR (C)		NBR	63
	20,0	4	07313MR	MR (C)		NBR	63
	24,5	14,7	03039MGE	MGE	LI	NBR	63
	25,0	14,7	00316MGE	MGE	LI	NBR	63
2,0	25,0	14,7	03038MGE1	MGE	LI	NBR	63
	27,0	7	00409MR	MR (A)	LI	NBR	63
	27,0	7,0	05053MR	MR (A)	LI	NBR	63
	27,5	7,0	05081MR	MR (A)		NBR	63
	28,0	7	03301MRP	MR (C)		ACM	63
	28,0	7,0	05067MR	MR (A)		NBR	63
	28,0	7,0	05082MR	MR (A)		NBR	63
17,0	39,8	3,5	00719MGE	MGE	LI	NBR	63
0,0	40,0	0,0	07460MRP	MR (C)	***	ACM	63
	52,0	6,5	07298MR	MR (C)		NBR	63
	52,0	8	07502MR	MR (C)		NBR	63
	68,0	8,5	07258MRP	MR (A)		ACM	63

TIPOS ALTERNATIVOS / TIPOS ALTERNATIVOS / ALTERNATIVE SEAL DESIGNS

Antes de especificar a utilização de um retentor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.  
Before specifying the use of a retainer, please check for availability • 0800 7712155

## GRUPO J RETENTORES SOMENTE DE BORRACHA

SOLO GOMA  
ONLY RUBBER

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabó Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
4,0	10,5	3,2	05086G	G (s/f)	LI	NBR	64
4,0	12,0	8	03042NE	NE (s/f)	LI	NBR	64
7,2	19,3	3	03078G	G (s/f)	LI	NBR	64
8,6	17,0	13/15,2	02734NE	NE (s/f)	LI	NBR	64
13,2	29,3	3	03077G	G (s/f)	LI	NBR	64
17,0	21,5	15	03050NEF	NE (74)	LI	FPM	64
17,5	25,0	4,8	05087G	G (s/f)	LI	NBR	64
19,7	31,8	18	03035GE	GE (140)	LI	NBR	64
22,9	34,8	26,7	03046GE	GE (140)	LI	NBR	64
24,3	39,5	9,2	00524NEO	NEO	LI	NBR	64
31,4	49,5	16,8	03232NE	NE (142)	LI	NBR	64
33,0	44,5	5,3	02011NEF	NE (s/f)	LI	FPM	64
47,0	56,8	14	01891NEO	NEO (75)	LI	NBR	64
50,0	76,0	6	07074NE	NE (141)	LI	NBR	64
	69,8	3,0	05085NE	NE (s/f)	LI	NBR	64

## GRUPO L RETENTORES FIXADOS POR PARAFUSO

REtenES FIJADOS POR TORNILLOS  
BOLT FLANGE SEAL

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabó Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
15,9	29,0	7,1	03388BAEF	BAE (79)	LI	FPM	64
19,0	50,8	1,7/7,7	02716BAEF	BAE (79)	LI	FPM	64
48,0	66,2	12	01793BAE	BAE (80)	LI	NBR	64
50,8	115,9	14,3	00039BAGE	BAGE (256)	LI	NBR	64
50,8	116,0	16,2	01595BAGE	BAGE (256)	LI	NBR	64
52,0	114,0	13	01794BAGE	BAGE (s/f)	LI	NBR	64
58,0	80,0	12,8	01795BAGE	BAGE (s/f)	LI	NBR	64
60,3	149,4	8,3	02098BAE	BAE (234)	BI	NBR	64
60,3	155,5	7,4	02333BAE	BAE (234)	BI	NBR	64
60,5	149,4	11,5	01028BE	BE (254)	LI	NBR	64
63,6	155,6	12	02033BAE	BAE (235)	BI	NBR	64
79,0	210,0	25,4	00461BE	BE (s/f)	LI	NBR	64
150,8	229,4	28,6	02044BAGE	BAGE (256)	BI	NBR	64
190,5	285,8	48,7	02065BAE	BAE (236)	BI	NBR	64

## GRUPO M RETENTORES DE METAL E FELTRO

REtenES DE METAL Y FIELTRO  
METAL AND FELT SEALS

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabó Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
19,0	26,8	6	01692MFE	MFE (A)			64
25,4		6,5/10	01651MFE	MFE (C)			64
44,5	66,6	12,7	01913MF	MF			64
60,0	75,0	5	01821MFE	MFE (A)			64
62,7	84,0	8/12,7	00096MFE	MFE (B)			64

## GRUPO N RETENTORES DE FELTRO

REtenES DE FIELTRO  
FELT SEALS

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabó Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page	
17,5		3,2	01402F	F			FELTRO	65
23,6	38,1	9,6	00287GF	GF			FELTRO	65
26,1	36,1	8	00757F	F			FELTRO	65
31,0	45,2	6,4	01680F	F			FELTRO	65
42,0		10	01534F	F			FELTRO	65
45,0	58,0	6	00860F	F			FELTRO	65
58,4		10,2	01104FE	FE			FELTRO	65
60,0	77,0	7	00858F	F			FELTRO	65
104,8		3,2	01632FE	FE (83)			FELTRO	65

## GRUPO O RETENTORES ESTAMPADOS

REtenES ESTAMPADOS  
STAMPED SEAL AND SLEEVE

Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabó Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Página Pagina Page
28,5	30,7	6,5	-	ME (D)	-	ESTAMP.	65
46,0	51,7	20	03214NE	ME (F)	LI	ESTAMP.	65
46,0	51,7	20	07106ME	ME (C)	-	ESTAMP.	65
57,3	90,1	7,5	07133ME	ME (C)	-	ESTAMP.	65
111,3	174,5	4	01633ME	ME (A)	-	ESTAMP.	65

**GRUPO P**  
**RETENTORES COM LÁBIO DE VEDAÇÃO EM PTFE**  
*REtenes con LABIO SELLADOR DE PTFE*  
*PTFE OIL SEAL*

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
40,0	62,0	7,4	05199GRGH	GRGH	H	PTFE	65
40,0	62,0	7,4	05581GRGH	GRGH (147)	H	PTFE	65
48,0	59,0	9,5	05735GRAH	GRAH	H	PTFE	65
53,7	67,7	7,0	05545MEH	MEH	LI	MEH	65
59,3	76,2	8,3	05229GRAGGH	GRAGGH	H	PTFE	65
63,5	79,5	8,0	05535GRAGH	GRAGGH	H	PTFE	65
75,0	93,0	8,0	05536GRAGH	GRAGGH	H	PTFE	65
78,0	104,0	11,0	05214GRAHF	GRAHF	H	ACM	65
100,0	130,0	12,0	05184GRAHF	GRAHF	H	ACM	65
110,0	130,0	13,0	05230GRAGH	GRAGGH	AH	PTFE	65
115,0	140,0	13,0	05155GRAHF	GRAHF	AH	ACM	65
120,0	140,0	13,0	05679GRAGH	GRAGH (148)	H	ACM	65
130,0	150,0	12	05287GRAGH	GRAGH (148)	AH	PTFE	65
145,0	175,0	13,0	05680GRAHF	GRAHF	AH	ACM	65

**GRUPO Q**  
**SISTEMAS INTEGRADOS DE VEDAÇÃO**  
*REtenes INTEGRADOS*  
*INTEGRATED SEALING SYSTEMS*

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
21,8	35/54,9	31,0	07240BAGEP	TA (figura)	H	ACM	65
21,8	35/54,9	31,0	07250TA	TA (figura)	LI	ACM	65
21,8	85,0	48,4	02952BAGEP	TA (figura)	H	ACM	65
28,0	40,0	54,5	07148BRAGEP	TA (figura)	H	ACM	65
74,0			05245MJEF	MJE	AH	FPM	65
79,0		21,0	05338PHSI	PHSI	AH	PTFE	65
85,0		13,0	05210GHSI	GHSI	AH	PTFE	65
85,0		13,0	05502GHSI	GHSI	AH	PTFE	65
85,0	105,0	15,7	05402GHSI	GHSI	AH	PTFE	65
85,0			05699IOSS	IOSS	AH		65
99,5	108,0	19,0	05239GHSIF	GHSIF	AH	PTFE	65
103,0	128,0	14,0	05228GHSI	GHSI (116)	AH	PTFE	65

**GRUPO R**  
**RETENTORES TIPOS "S"**  
*REtenes TIPO "S"*  
*"S" TYPE OIL SEAL*

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
14,2	50,7	10,7/46,1	02020S	S (150)	LI	NBR	65
17,5	50,0	21,5	07266S	S (255)	LI	NBR	65
17,5	50,0	21,5	07679S	S (255)	LI	NBR	65
21,9	52,8	2,0/21,6	03033S	S	LI	CR	65
30,0	108,0	20,7	07066S	S (149)	LI	NBR	65

**GRUPO S**  
**RETENTORES COMPOSTOS EM KITS**  
*REtenes COMPUESTOS EN KITS*  
*OIL SEAL*

Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Número Sabó Número Sabo Sabo Number	Tipo (Figura) Tipo (Figura) Type (Figure)	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Página Pagina Page
40,0	62,0	7,4	05702KIT	KIT	H	PTFE	s/f
44,5	62,0	12,0	01095JOGO 2	KIT	BL	NBR	s/f
63,5	79,5	8,0	05603KIT	KIT	H	PTFE	s/f
75,0	93,0	8,0	05604KIT	KIT	H	PTFE	s/f
114,0	174,4	16	01466MFBE	MFBE		ESTAMP.	s/f
130,0	150,0	22,0	05728KIT	KIT	AH	PTFE	s/f
			05513KIT	KIT			s/f
			05518KIT	KIT			s/f

TIPOS ALTERNATIVOS / TIPOS ALTERNATIVOS / ALTERNATIVE SEAL SESSION

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## ÍNDICE NUMÉRICO

INDICE NUMERICO

NUMERICAL INDEX

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Grupo Grupo Group
00001BE	BE(19)	81,0	117,5	14,5/19,0	LI	NBR	A
00002B	B	81,0	117,5	14,3	LI	NBR	TB
00003BE	BE(18)	79,4	115,9	10,1/30,5	LI	NBR	A
00004B	B	52,4	72,1	11,4	LI	NBR	TB
00005B	B	52,4	81,0	11,5	LI	NBR	TB
00006BA	BA	53,8	77,7	12,7	LI	NBR	TB
00007B	B	98,5	144,5	19,0	LI	NBR	TB
00008B	B	79,4	117,4	14,3	LI	NBR	TB
00009BR	BR	35,0	60,3	12,7	LI	NBR	TB
00010GA	GA	58,7	84,1	9,5	LI	NBR	TB
00012BA	BA	44,8	61,3	12,0	LI	NBR	TB
00013B	B	57,3	76,2	12,7	LI	NBR	TB
00013BRG	BRG	57,3	76,2	12,7	H	NBR	TB
00014BGO	BGO	57,2	92,0	18,0	LI	NBR	A
00015GA	GA	47,6	75,3	6,4	LI	NBR	TB
00016B	B	39,7	61,2	12,7	LI	NBR	TB
00017B	B	31,8	42,8	9,5	LI	NBR	TB
00018BE	BE	92,0	123,8	15,0/19	LI	NBR	A
00019BR	BR	38,1	63,5	12,7	LI	NBR	TB
00021B	B	60,3	88,4	11,0	LI	NBR	TB
00022BAE	BAE (165)	43,7	71,9	9,0/21,6	LI	NBR	A
00023BAE	BAE (166)	43,7	72,1	9,0/21,6	LI	NBR	A
00025B	B	85,7	119,0	12,7	LI	NBR	TB
00026GA	GA	35,0	61,8	7,5	LI	NBR	TB
00028B	B	31,7	50,7	11,0	LI	NBR	TB
00029BAE	BAE (15)	39,7	80,2	6,4/15,0	LI	NBR	A
00030B	B	66,7	92,0	12,0	LI	NBR	TB
00033B	B	35,0	63,5	12,7	LI	NBR	TB
00037B	B	53,9	73,0	12,7	LI	NBR	TB
00039BAGE	BAGE (256)	50,8	115,9	14,3	LI	NBR	L
00042BR	BR	135,0	190,0	15,0	LI	NBR	TB
00043BA	BA	100,0	130,0	13,0	LI	NBR	TB
00044BR	BR	62,0	85,0	13,0	LI	NBR	TB
00045B	B	95,0	125,0	13,0	LI	NBR	TB
00046BR	BR	75,0	95,1	13,0	LI	NBR	TB
00047B	B	52,0	72,0	12,0	LI	NBR	TB
00047BAGF	BAG	52,0	72,0	12,0	LI	FPM	TB
00048BR	BR	50,8	76,3	12,7	LI	NBR	TB
00049B	B	38,1	60,3	12,7	LI	NBR	TB
00049BAG	BAG	38,1	60,3	12,7	AH	NBR	TB
00049BAGE	BAGE (16)	38,1	60,3	12,7	AH	NBR	A
00051BRP	BR	65,0	90,0	10,0	LI	ACM	TB

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Grupo Grupo Group
000054BR	BR	28,6	39,7	9,5	LI	NBR	TB
000056B	B	28,6	46,6	11,3	LI	NBR	TB
000058B	B	65,8	88,4	12,7	LI	NBR	TB
000063BRG	BRG	45,0	62,0	10,0	LI	NBR	TB
000065GA	GA	62,0	92,0	9,5	LI	NBR	TB
000066BAG	BAG	39,4	62,0	14,0	AH	NBR	TB
000069B	B	44,5	69,8	12,7	LI	NBR	TB
000070BA	BA	58,7	85,0	8,0	LI	NBR	TB
000072BA	BA	49,2	69,9	9,5	LI	NBR	TB
000078BAE	BAE (166)	49,2	80,1	22,2	LI	NBR	A
000081B	B	69,9	98,5	12,7	LI	NBR	TB
000083B	B	41,3	61,9	12,0	LI	NBR	TB
000085B	B	87,3	120,8	14,3	LI	NBR	TB
000087B	B	72,2	100,0	12,7	LI	NBR	TB
000089B	B	9,5	25,4	9,5	LI	NBR	TB
000092BGOE	BGOE (185)	47,6	70,7	16,7	LI	NBR	A
000093BA	BA	53,9	76,2	12,7	LI	NBR	TB
000096MFE	MFE (B)	62,7	84,0	8/12,7		Metal/ Feltro	M
000097BRE	BRE (191)	44,8	61,3	2,7/12	LI	NBR	A
000098B	B	73,0	95,2	12,7	LI	NBR	TB
000099B	B	119,0	146,0	14,3	LI	NBR	TB
000100B	B	22,2	38,1	9,5	LI	NBR	TB
000101B	B	44,5	63,6	12,7	LI	NBR	TB
000109B	B	57,2	81,0	12,7	LI	NBR	TB
00114GR	GR	31,7	42,9	5,0	LI	NBR	TB
00116B	B	73,0	101,6	12,7	LI	NBR	TB
00117GR	GR	28,6	39,8	4,7	LI	NBR	TB
00118BAG	BAG	22,0	35,0	10,0	LI	NBR	TB
00119GA	GA	15,9	23,8	4,8	LI	NBR	TB
00120BAG	BAG	63,5	88,9	12,7	LI	NBR	TB
00121BA	BA	27,0	42,9	7,1	LI	NBR	TB
00122GA	GA	28,5	36,5	7,0	LI	NBR	TB
00123B	B	101,6	126,9	12,7	LI	NBR	TB
00125B	B	114,3	139,7	14,3	LI	NBR	TB
00127B	B	29,4	46,5	10,0	LI	NBR	TB
00128BR	BR	44,5	66,7	12,7	LI	NBR	TB
00129BR	BR	12,7	25,4	9,5	LI	NBR	TB
00131BR	BR	30,0	47,0	10,0	LI	NBR	TB
00133BR	BR	41,3	63,6	12,7	LI	NBR	TB
00134B	B	81,0	114,2	12,0	LI	NBR	TB
00136BA	BA	35,0	62,0	12,0	LI	NBR	TB
00141BA	BA	25,4	38,1	10,0	LI	NBR	TB

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Número Sabo Número Sabo Sabo Number	Tipo Tipo Type	Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material Labio Material Labio Material	Grupo Grupo Group
00145B	B	25,4	46,6	9,5	LI	NBR	TB
00146B	B	57,2	79,3	12,7	LI	NBR	TB
00150BA	BA	22,2	33,2	10,3	LI	NBR	TB
00155B	B	47,6	69,8	12,7	LI	NBR	TB
00156B	B	15,9	28,6	9,5	LI	NBR	TB
00156BRO	BRO (204)	15,9	28,6	9,5	LI	NBR	A
00157BA	BA	49,2	63,5	9,5	LI	NBR	TB
00158B	B	19,0	38,1	10,0	LI	NBR	TB
00159BR	BR	19,0	35,0	10,0	LI	NBR	TB
00160BR	BR	165,0	190,0	12,9	LI	NBR	TB
00161BRG	BRG	48,0	72,0	10,0	LI	NBR	TB
00162BR	BR	50,0	71,9	12,0	LI	NBR	TB
00164BAG	BAG	65,0	90,0	13,0	LI	NBR	TB
00164BR	BR	65,0	90,0	13,0	LI	NBR	TB
00166BR	BR	39,7	62,0	12,0	LI	NBR	TB
00168BAE	BAE (167)	60,3	91,4	6,4/15,3	LI	NBR	A
00170BA	BA	32,0	44,3	9,0	LI	NBR	TB
00177GE	GE (119)	68,3	85,6	5,3/14,8	LI	NBR	A
00181BE	BE (240)	73,0	104,7	9,6/20,6	LI	NBR	A
00183BAG	BAG	38,1	50,4	10,9	LI	NBR	A
00188BA	BA	57,3	84,0	8,0	LI	NBR	TB
00191BR	BR	25,0	41,1	9,5	LI	NBR	TB
00198BA	BA	8,0	17,5	8,0	LI	NBR	TB
00203BR	BR	38,1	54,1	11,0	LI	NBR	TB
00211BGO	BGO	149,2	181,0	12,7	LI	NBR	A
00214BR	BR	35,0	54,0	11,0	LI	NBR	TB
00218B	B	36,5	57,1	12,7	LI	NBR	TB
00219BR	BR	44,0	76,1	12,7	LI	NBR	TB
00220BAE	BAE (161)	47,8	60,9	6,4	LI	NBR	A
00221B	B	79,4	104,7	12,7	LI	NBR	TB
00222BAG	BAG	44,7	61,2	9,5	H	NBR	TB
00223BR	BR	60,0	80,0	10,0	AH	NBR	TB
00224BRGE	BRGE (55)	22,1	40,0	12,0/17	H	NBR	A
00224BRGE	BRGE (02)	22,1	40,0	12,0/17	H	NBR	A
00224BRG	BRG (123)	22,1	40,0	12,0/17	H	ACM	A
00228BAG	BAG	68,0	90,0	10,0	LI	NBR	TB
00229B	B	49,2	80,9	11,0	LI	NBR	TB
00231BRG	BRG	53,9	81,1	12,0	LI	NBR	TB
00248BR	BR	142,9	171,1	14,3	LI	NBR	TB
00250BR	BR	120,7	146,1	12,5	LI	NBR	TB
00250BRP	BR	120,7	146,1	12,5	LI	ACM	TB
00254BAO	BAO (178)	38,1	57,1	11,0	LI	NBR	A

Número Sabo Número Sabo Sabo Number	Tipo Tipo Type	Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material Labio Material Labio Material	Grupo Grupo Group
00258GA	GA	35,0	57,9	6,4	LI	NBR	TB
00262B	B	28,0	47,0	10,0	LI	NBR	TB
00262BA	BA	28,0	47,0	10,0	LI	NBR	TB
00264BR	BR	47,7	62,1	8,0	LI	NBR	TB
00265BR	BR	40,0	56,1	12,0	LI	NBR	TB
00266BR	BR	25,0	47,0	10,0	LI	NBR	TB
00268BR	BR	190,0	220,0	14,8	LI	NBR	TB
00268BRP	BR	190,0	220,0	14,8	LI	ACM	TB
00269BAGS	BAG	75,0	100,0	12,0	H	MVQ	TB
00269BR	BR	75,0	100,0	12,0	LI	NBR	TB
00272BRG	BRG	45,0	60,0	7,0	LI	NBR	TB
00273B	B	57,2	85,0	12,7	LI	NBR	TB
00274BGO	BGO	50,8	81,0	11,9	LI	NBR	A
00276B	B	44,5	73,0	12,0	LI	NBR	TB
00283BR	BR	25,4	36,4	6,4	LI	NBR	TB
00284BR	BR	35,0	55,5	6,4	LI	NBR	TB
00285BA	BA	27,0	38,1	6,4	LI	NBR	TB
00286BR	BR	15,9	25,4	4,5	LI	NBR	TB
00287GF	GF	23,6	38,1	9,6		FELTRO	N
00288BR	BR	42,0	56,0	7,0	LI	NBR	TB
00289BA	BA	12,0	22,0	7,0	LI	NBR	TB
00291B	B	49,2	76,1	12,7	LI	NBR	TB
00291BR	BR	49,2	76,1	12,7	LI	NBR	TB
00293BR	BR	14,3	28,5	6,4	LI	NBR	TB
00294BR	BR	22,0	35,0	6,7	LI	NBR	TB
00300B	B	89,0	114,3	11,5	LI	NBR	TB
00302B	B	46,0	62,0	7,0	LI	NBR	TB
00305BAG	BAG	60,0	78,1	8,8	LI	NBR	TB
00309B	B	127,0	158,7	12,7	LI	NBR	TB
00310B	B	127,0	165,1	16,0	LI	NBR	TB
00311B	B	12,7	28,5	9,5	LI	NBR	TB
00316MGE	MGE			25,0	14,7	LI	NBR
00321BA	BA	57,2	82,5	12,7	LI	NBR	TB
00322BA	BA	33,3	46,4	9,5	LI	NBR	TB
00323BGO	BGO	74,6	101,6	17,4	LI	NBR	A
00327BF	BF	25,4	44,5	14,3	LI	NBR/FE	A
00329BA	BA	19,0	28,5	6,4	LI	NBR	TB
00334BAG	BAG	60,3	92,0	12,0	H	NBR	TB
00334BAGE	BAGE (172)	60,3	92,0	12,0/18,0	H	NBR	A
00338BGO	BGO	19,0	31,9	9,5	LI	NBR	A
00342GAG	GAG	17,0	28,6	6,4	LI	NBR	A
00343BR	BR	31,7	44,5	8,0	LI	NBR	TB

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Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.

Before specifying the use of a retainer, please check for availability • 0800 7712155

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00344BE	BAGE (144)	15,0	25,0	8,1/19	LI	NBR	C
00357B	B	76,2	101,7	12,0	LI	NBR	TB
00357BA	BA	76,2	101,7	12,0	LI	NBR	TB
00358BR	BR	30,0	50,0	10,0	LI	NBR	TB
00359BR	BR	45,0	65,0	10,0	LI	NBR	TB
00360BA	BA	20,0	40,0	10,0	LI	NBR	TB
00361BA	BA	42,0	62,0	12,0	LI	NBR	TB
00366B	B	92,0	126,9	12,7	LI	NBR	TB
00368BAG	BAG	47,6	62,7	11,1	LI	NBR	TB
00369BR	BR	66,7	88,9	12,7	LI	NBR	TB
00371B	B	60,3	85,0	12,0	LI	NBR	TB
00373GA	GA	39,1	62,2	6,4	LI	NBR	TB
00375BA	BA	15,9	35,0	10,0	LI	NBR	TB
00376B	B	69,8	95,2	12,7	LI	NBR	TB
00377BB	BB	76,2	101,6	19,0	LI	NBR	A
00378B	B	63,5	89,9	12,0	LI	NBR	TB
00379BR	BR	66,7	95,3	12,7	LI	NBR	TB
00405B	B	47,6	66,6	12,7	LI	NBR	TB
00409MR	MR (A)		27,0	7,0	LI	NBR	G
00420BR	BR	125,0	150,1	13,0	LI	NBR	TB
00421BAGG	BAGG	73,0	101,6	11,5	BI	NBR	A
00423BR	BR	70,0	100,0	12,0	LI	NBR	TB
00434B	B	66,7	112,7	11,0	LI	NBR	TB
00436B	B	54,0	79,4	12,7	LI	NBR	TB
00436BAG	BAG	54,0	79,4	12,7	H	NBR	TB
00436BAGE	BAGE (172)	54,0	79,4	12,7	H	NBR	A
00439BR	BR	100,0	162,1	15,0	LI	NBR	TB
00442BR	BR	92,1	124,0	15,8	LI	NBR	TB
00448BA	BA	25,4	34,9	6,4	LI	NBR	TB
00455BA	BA	30,2	47,0	8,0	LI	NBR	TB
00456BA	BA	57,0	69,8	6,4	LI	NBR	TB
00459BR	BR	55,0	80,0	10,0	LI	NBR	TB
00460BR	BR	62,0	85,0	10,0	LI	NBR	TB
00461BE	BE	79,0	210,0	25,4	LI	NBR	L
00463BR	BR	25,0	52,0	10,0	LI	NBR	TB
00466B	B	79,4	109,9	13,0	LI	NBR	TB
00468B	B	50,8	69,8	12,7	LI	NBR	TB
00469B	B	25,0	40,0	10,0	LI	NBR	TB
00470GA	GA	38,1	50,8	5,5	LI	NBR	TB
00474GAE	GAE (20)	60,2	84,0	8/12,7	LI	NBR	A
00477BA	BA	32,0	57,1	9,5	LI	NBR	TB
00479BR	BR	38,0	52,0	10,0	LI	NBR	TB

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material lábio Material Lábio Material	Grupo Grupo Group
00479BR	BRG	38,0	52,0	10,0	LI	NBR	TB
00480BA	BA	82,0	105,0	13,0	LI	NBR	TB
00482GAF	GA	7,8	14,6	4,8	LI	FPM	TB
00484BA	BA	30,0	50,1	12,0	LI	NBR	TB
00485BA	BA	35,0	47,0	7,0	LI	NBR	TB
00486BA	BA	38,0	50,0	7,0	LI	NBR	TB
00490BR	BR	70,0	90,0	13,0	LI	NBR	TB
00491B	B	105,0	130,0	13,0	LI	NBR	TB
00492BA	BA	35,0	56,1	12,0	LI	NBR	TB
00495BA	BA	32,0	45,0	7,0	LI	NBR	TB
00496BRG	BRG	18,0	30,0	7,0	LI	NBR	TB
00497BRG	BRG	90,0	120,0	13,0	LI	NBR	TB
00498BR	BR	55,0	80,0	13,0	LI	NBR	TB
00499BR	BR	25,0	50,1	10,0	LI	NBR	TB
00500BAG	BAG	68,0	90,0	13,0	H	NBR	TB
00500BAGF	BAG	68,0	90,0	13,0	H	FPM	TB
00500BAGP	BAG	68,0	90,0	13,0	H	ACM	TB
00501BR	BR	60,0	75,1	8,0	LI	NBR	TB
00502BR	BR	140,0	170,0	13,0	LI	NBR	TB
00503BR	BR	28,0	52,1	10,0	LI	NBR	TB
00504BGO	BGO	80,0	100,0	13,0	LI	NBR	A
00505BR	BR	20,0	30,0	7,0	LI	NBR	TB
00505BRE	BRE (187)	20,0	30,0	7,0	LI	NBR	A
00506BR	BR	25,0	43,1	10,0	LI	NBR	TB
00508BA	BA	17,0	28,0	7,0	LI	NBR	TB
00508BAG	BAG	17,0	28,0	7,0	LI	NBR	TB
00509BR	BR	45,0	72,0	12,0	LI	NBR	TB
00510BRX	BRX	16,0	35,0	12,0	LI	NBR	F
00514BR	BR	115,0	140,0	13,0	LI	NBR	TB
00515GA	GA	15,0	30,0	5,0	LI	NBR	TB
00516B	B	110,0	140,0	13,0	LI	NBR	TB
00516BG	BG	110,0	140,0	13,0	BI	NBR	A
00517BR	BR	60,0	90,0	10,0	LI	NBR	TB
00519BA	BA	31,0	41,0	9,5	LI	NBR	TB
00520BR	BR	35,0	47,1	10,0	LI	NBR	TB
00521BR	BR	42,0	62,1	10,0	LI	NBR	TB
00522BRG	BRG	48,0	72,1	7,0	LI	NBR	TB
00524NEO	NEO	24,3	39,5	9,2	LI	NBR	J
00527B	B	48,0	65,0	10,0	LI	NBR	TB
00533BA	BA	42,8	68,2	10,7	LI	NBR	TB
00536B	B	108,0	133,3	12,0	LI	NBR	TB
00541B	B	14,3	28,5	9,5	LI	NBR	TB

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00546BR	BR	119,0	162,1	15,0	LI	NBR	TB
00547B	B	59,5	85,6	12,0	LI	NBR	TB
00554BA	BA	44,5	79,9	11,1	LI	NBR	TB
00556GB	GB	59,9	85,5	17,5	LI	NBR	A
00561BAG	BAG	42,0	64,9	12,0	LI	NBR	TB
00563BR	BR	54,0	72,0	8,0	LI	NBR	TB
00564BR	BR	42,8	63,4	9,5	LI	NBR	TB
00566BA	BA	48,0	62,0	8,0	LI	NBR	TB
00569B	B	19,0	31,7	6,4	LI	NBR	TB
00569BR	BR	19,0	31,7	6,4	LI	NBR	TB
00572BR	BR	22,3	35,0	6,4	LI	NBR	TB
00573B	B	74,0	114,0	11,0	LI	NBR	TB
00577BGOP	BGO	89,0	111,1	12,7	LI	ACM	A
00581BR	BR	28,6	39,7	6,4	LI	NBR	TB
00586BR	BR	50,9	69,8	9,5	LI	NBR	TB
00586BRG	BRG	50,9	69,8	9,5	H	NBR	TB
00588B	B	44,5	68,2	12,7	LI	NBR	TB
00593B	B	82,0	104,7	14,3	LI	NBR	TB
00604BR	BR	43,0	62,0	10,0	LI	NBR	TB
00607B	B	28,2	43,0	9,1	LI	NBR	TB
00608B	B	17,8	35,0	9,5	LI	NBR	TB
00609BR	BR	75,0	100,0	10,0	LI	NBR	TB
00610BR	BR	80,0	100,0	10,0	LI	NBR	TB
00612BR	BR	84,0	110,1	16,0	LI	NBR	TB
00615BR	BR	36,0	56,0	10,0	LI	NBR	TB
00616BR	BR	102,0	130,0	13,0	LI	NBR	TB
00618BAG	BAG	85,0	110,0	14,0	LI	NBR	TB
00620B	B	55,0	75,0	12,0	LI	NBR	TB
00626BGO	BGO	41,1	62,0	16,0	LI	NBR	A
00630B	B	50,8	73,0	12,7	LI	NBR	TB
00631B	B	101,6	130,1	14,3	LI	NBR	TB
00634BAG	BAG	28,6	44,5	11,0	LI	NBR	TB
00642B	B	88,9	126,9	12,7	LI	NBR	TB
00644B	B	82,5	107,9	11,9	LI	NBR	TB
00644BGO	BGO	82,5	107,9	11,9	LI	NBR	A
00649B	B	136,5	168,3	15,9	LI	NBR	TB
00649BGO	BGO	136,5	168,3	15,9	LI	NBR	A
00650B	B	106,4	126,9	12,0	LI	NBR	TB
00651B	B	66,7	88,4	12,7	LI	NBR	TB
00652BG	BG	63,5	88,9	17,8	LI	NBR	A
00653B	B	50,0	69,6	12,7	LI	NBR	TB
00660B	B	50,8	80,0	12,7	LI	NBR	TB

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retén Altura Retén Width	Orientação Orientación Direction of Rotation	Material Iábio Material Labio Material	Grupo Grupo Group
00674B	B	47,7	73,0	12,0	LI	NBR	TB
00688BAP	BA	120,0	140,0	13,0	AH	ACM	TB
00692B	B	41,3	66,6	12,7	LI	NBR	TB
00694B	B	35,0	53,9	9,5	LI	NBR	TB
00695GB	GB	44,5	85,6	16,0	LI	NBR	A
00701B	B	30,0	50,8	11,0	LI	NBR	TB
00708BR	BR	49,2	65,0	8,0	LI	NBR	TB
00709BR	BR	25,0	44,9	5,0	LI	NBR	TB
00712BR	BR	20,0	32,0	6,0	LI	NBR	TB
00713GA	GA	28,0	34,9	5,0	LI	NBR	TB
00714BA	BA	19,0	41,3	8,0	LI	NBR	TB
00715BA	BA	20,0	35,0	6,0	LI	NBR	TB
00716B	B	14,3	25,4	9,5	LI	NBR	TB
00719MGE	MGE	17,0	39,8	3,5	LI	NBR	G
00726BR	BR	16,3	24,0	7,0	LI	NBR	TB
00734BR	BR	44,5	57,2	9,4	LI	NBR	TB
00735B	B	57,1	80,0	13,0	LI	NBR	TB
00737BA	BA	88,0	110,0	13,0	LI	NBR	TB
00744BBO	BBO (182)	104,8	139,6	14,3	LI	NBR	A
00745BGO	BGO	18,7	34,9	8,7	LI	NBR	A
00749BA	BA	44,5	54,0	4,8	LI	NBR	TB
00752BA	BA	50,8	79,9	10,0	LI	NBR	TB
00757F	F	26,1	36,1	8,0		FELTRO	N
00758BR	BR	35,0	52,1	12,0	LI	NBR	TB
00760BR	BR	20,0	35,0	10,0	LI	NBR	TB
00761BR	BR	22,0	40,0	7,0	LI	NBR	TB
00762BR	BR	31,0	47,0	7,0	LI	NBR	TB
00763BR	BR	24,0	47,0	7,0	LI	NBR	TB
00764BA	BA	10,0	30,0	7,0	LI	NBR	TB
00766BA	BA	15,0	30,0	8,0	LI	NBR	TB
00767BA	BA	20,0	32,0	5,0	LI	NBR	TB
00768B	B	25,4	38,0	8,0	LI	NBR	TB
00768BGO	BGO	25,4	38,0	8,0	LI	NBR	A
00769BA	BA	22,0	31,9	5,0	LI	NBR	TB
00770B	B	25,0	62,0	10,0	LI	NBR	TB
00771BA	BA	28,5	50,7	10,0	LI	NBR	TB
00772BA	BA	30,0	55,0	12,0	LI	NBR	TB
00774B	B	31,7	50,8	9,5	LI	NBR	TB
00775BA	BA	44,0	79,9	12,0	LI	NBR	TB
00776BA	BA	55,0	101,6	10,0	LI	NBR	TB
00780BR	BR	125,0	160,0	12,0	LI	NBR	TB
00784BR	BR	19,0	35,0	7,0	LI	NBR	TB

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00785BA	BA	26,0	43,0	10,0	LI	NBR	TB
00788BAG	BAG	25,0	35,0	10,0	LI	NBR	TB
00789BA	BA	35,0	50,0	10,0	LI	NBR	TB
00789BR	BR	35,0	50,0	10,0	LI	NBR	TB
00790BR	BR	15,0	24,0	7,0	LI	NBR	TB
00793BA	BA	55,0	90,0	10,0	LI	NBR	TB
00795BR	BR	16,0	30,0	10,0	LI	NBR	TB
00796BR	BR	16,0	32,0	7,0	LI	NBR	TB
00797BR	BR	36,0	54,0	7,0	LI	NBR	TB
00797BA	BA	36,0	54,0	7,0	LI	NBR	TB
00798BA	BA	19,0	31,9	7,0	LI	NBR	TB
00800BA	BA	35,0	62,0	9,5	LI	NBR	TB
00801BR	BR	32,0	52,1	10,0	LI	NBR	TB
00803BAG	BAG	110,0	130,0	13,0	LI	NBR	TB
00803BAS	BA	110,0	130,0	13,0	LI	MVQ	TB
00803BRGS	BRG	110,0	130,0	13,0	AH	MVQ	TB
00804BR	BR	55,0	75,0	10,0	LI	NBR	TB
00805BGO	BGO	62,0	85,0	11,9	LI	NBR	A
00807BA	BA	6,4	16,1	6,4	LI	NBR	TB
00810BA	BA	30,0	40,0	8,0	LI	NBR	TB
00813BA	BA	30,0	43,0	9,5	LI	NBR	TB
00813BAG	BAG	30,0	43,0	9,5	LI	NBR	TB
00815BR	BR	22,0	42,0	10,0	LI	NBR	TB
00817BR	BR	30,0	56,0	12,0	LI	NBR	TB
00818BR	BR	60,0	80,0	13,0	LI	NBR	TB
00819BR	BR	78,0	110,0	13,0	LI	NBR	TB
00821BR	BR	19,0	31,8	6,4	LI	NBR	TB
00822BA	BA	35,0	45,0	7,0	LI	NBR	TB
00824B	B	30,0	52,0	12,0	LI	NBR	TB
00828BR	BR	17,0	35,0	10,0	LI	NBR	TB
00829BR	BR	24,0	38,0	9,0	LI	NBR	TB
00832BR	BR	30,0	45,0	12,0	LI	NBR	TB
00834BR	BR	50,0	72,1	10,0	LI	NBR	TB
00837B	B	40,0	70,0	12,0	LI	NBR	TB
00838B	B	53,0	75,0	12,0	LI	NBR	TB
00839BR	BR	32,0	50,0	8,0	LI	NBR	TB
00843B	B	52,4	69,8	12,7	LI	NBR	TB
00844B	B	25,4	44,3	8,3	LI	NBR	TB
00847BAG	BAG	30,0	42,0	7,0	LI	NBR	TB
00848GA	GA	47,5	76,1	9,5	LI	NBR	TB
00849BA	BA	46,3	66,6	6,4	LI	NBR	TB
00853BR	BR	17,0	35,0	7,0	LI	NBR	TB

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retén Altura Retén Width	Orientação Orientación Direction of Rotation	Material Lábio Material Lábio Material	Grupo Grupo Group
00858F	F	60,0	77,0	7,0			FELTRO N
00860F	F	45,0	58,0	6,0			FELTRO N
00866BR	BR	70,0	100,0	10,0	LI	NBR	TB
00867BR	BR	52,0	80,1	10,0	LI	NBR	TB
00871BGO	BGO	39,7	68,2	11,1	LI	NBR	A
00877BR	BR	44,5	60,3	9,5	LI	NBR	TB
00879BR	BR	35,0	52,3	9,5	LI	NBR	TB
00880BR	BR	40,0	56,0	8,0	LI	NBR	TB
00888GA	GA	19,0	25,4	3,2	LI	NBR	TB
00891BRG	BRG	69,8	92,0	14,2	LI	NBR	TB
00893BA	BA	75,0	90,0	12,0	LI	NBR	TB
00897BR	BR	40,0	60,0	12,0	LI	NBR	TB
00900BR	BR	80,0	110,0	12,0	LI	NBR	TB
00903BA	BA	65,0	88,5	12,7	LI	NBR	TB
00904BRGE	BRGE (196)	40,1	52,0	2,5/8,5	LI	NBR	A
00906BR	BR	70,0	85,0	8,0	LI	NBR	TB
00907BR	BR	63,5	76,1	9,5	LI	NBR	TB
00909BR	BR	20,0	47,1	10,0	LI	NBR	TB
00911BRG	BRG	30,0	50,0	11,0	LI	NBR	TB
00912BRG	BRG	35,0	52,0	12,0	LI	NBR	TB
00913BR	BR	40,0	80,0	10,0	LI	NBR	TB
00916BA	BA	15,0	28,0	7,0	LI	NBR	TB
00918BR	BR	20,0	36,0	10,0	LI	NBR	TB
00919BR	BR	56,0	85,0	13,0	LI	NBR	TB
00922BR	BR	20,0	40,3	10,0	LI	NBR	TB
00924BR	BR	40,0	57,0	12,0	LI	NBR	TB
00925BA	BA	25,0	42,0	8,0	LI	NBR	TB
00926BR	BR	65,0	85,1	10,0	LI	NBR	TB
00932BR	BR	28,6	39,8	7,0	LI	NBR	TB
00934B	B	25,4	41,3	9,5	LI	NBR	TB
00937BAG	BAG	22,2	34,9	8,0	LI	NBR	TB
00937B	B	22,2	35,0	8,0	LI	NBR	TB
00937BGO	BGO	22,0	34,8	8,0	LI	NBR	A
00937BG	BG	22,2	35,0	8,0	LI	NBR	A
00946BR	BR	50,0	70,0	10,0	LI	NBR	TB
00947BR	BR	28,0	47,5	9,5	LI	NBR	TB
00949BR	BR	30,0	52,0	10,0	LI	NBR	TB
00950B	B	28,6	50,3	9,5	LI	NBR	TB
00951GA	GA	41,3	75,8	6,4	LI	NBR	TB
00952BR	BR	30,0	52,0	8,0	LI	NBR	TB
00953BR	BR	20,0	32,1	7,0	LI	NBR	TB
00954BAE	BAE (163)	38,0	50,0	10,0/16,0	LI	NBR	A

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00955BAG	BAG	22,0	35,0	9,0	LI	NBR	TB
00959B	B	19,0	34,9	9,5	LI	NBR	TB
00961B	B	28,6	52,3	9,5	LI	NBR	TB
00962BR	BR	35,0	50,0	8,0	H	NBR	TB
00962BRGP	BRG	35,0	50,0	8,0	H	ACM	TB
00963BAG	BAG	20,5	41,2	5,0	LI	NBR	TB
00964B	B	55,0	90,0	12,5	LI	NBR	TB
00969BR	BR	35,0	47,1	9,0	LI	NBR	TB
00974BA	BA	52,4	76,2	7,9	LI	NBR	TB
00974GAO	GAO (216)	52,4	76,2	7,9	LI	NBR	A
00977BR	BR	60,0	82,0	12,0	LI	NBR	TB
00979BRGE	BRGE (196)	40,1	52,0	3,5/9	LI	NBR	A
00980BA	BA	16,0	28,0	7,0	LI	NBR	TB
00981GA	GA	12,7	25,4	6,4	LI	NBR	TB
00989BAG	BAG	19,0	31,8	8,0	LI	NBR	TB
00992BRG	BRG	22,0	40,0	8,0	LI	NBR	TB
00994BA	BA	20,0	40,0	7,0	LI	NBR	TB
00994BRG	BRG	20,0	40,0	7,0	LI	NBR	TB
00995BA	BA	38,2	63,5	11,1	BI	NBR	TB
00998BR	BR	8,5	16,0	6,5	H	NBR	TB
01004BAG	BAG	35,5	58,2	13,0	BI	NBR	TB
01007BABEP	BABE	60,2	85,7	22,9	LI	ACM	A
01008BAGEP	BAGE (41)	54,0	81,1	22,9	LI	ACM	A
01009BR	BR	25,4	44,6	6,4	LI	NBR	TB
01012BGO	BGO	54,0	77,8	19,0	LI	NBR	A
01017BR	BR	49,0	75,0	11,0	LI	NBR	TB
01019BR	BR	25,0	38,0	6,4	LI	NBR	TB
01020B	B	28,0	50,0	12,0	LI	NBR	TB
01022BR	BR	28,6	38,0	7,0	LI	NBR	TB
01028BE	BE (254)	60,5	149,4	11,5	LI	NBR	L
01033BB	BB	38,1	63,5	19,0	LI	NBR	A
01035GR	GR	55,0	68,0	4,0	LI	NBR	TB
01038B	B	45,0	85,0	13,0	LI	NBR	TB
01040BA	BA	33,3	69,4	7,9	LI	NBR	TB
01041B	B	35,0	47,6	9,5	LI	NBR	TB
01043B	B	94,9	130,0	13,0	LI	NBR	TB
01044BAG	BAG	74,0	90,0	10,0	LI	NBR	TB
01045BRG	BRG	26,0	37,0	7,0	LI	NBR	TB
01046BAG	BAG	40,0	56,0	10,0	LI	NBR	TB
01048BR	BR	34,5	48,1	8,8	LI	NBR	TB
01049BRE	BRE (241)	46,0	76,2	9,5/12,7	LI	NBR	A
01050BR	BR	60,4	79,4	9,3	LI	NBR	TB

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01050BRGS	BRG	60,4	79,4	9,3	H	MVQ	TB
01051BR	BR	15,0	35,1	10,0	LI	NBR	TB
01058BR	BR	15,0	35,0	7,0	LI	NBR	TB
01063BA	BA	30,2	62,0	12,0	LI	NBR	TB
01064MV	MV	50,8	58,0	11,5	LI	PH	D
01067BR	BR	10,8	22,2	5,4	LI	NBR	TB
01072BA	BA	17,0	28,0	6,0	LI	NBR	TB
01074BRG	BRG	13,0	26,0	9,0	LI	NBR	TB
01076B	B	15,0	28,6	8,0	LI	NBR	TB
01077BBOE	BBOE	50,0	81,0	18,0/53,0	LI	NBR	A
01081BR	BR	42,0	72,0	12,0	LI	NBR	TB
01089BRX	BRX	22,0	45,0	12,0	LI	NBR	F
01090JOGO	JOGO	143,0	150,0	27,0	LI	NBR	F
01090BRXE	BRXE (251)	143,0	150,0	27,0	LI	NBR	F
01091GB	GB	73,0	101,7	17,4	LI	NBR	A
01093BR	BR	9,5	19,2	7,0	LI	NBR	TB
01095JOGO 2	KIT	44,5	62,0	12,0	BI	NBR	S
01095BRG	BRG	44,5	62,0	11,0	BI	NBR	TB
01095BRG	BRG	44,5	62,0	12,0	BI	NBR	TB
01097BR	BR	12,7	30,0	8,0	LI	NBR	TB
01100BAG	BAG	41,1	65,4	13,0	BI	NBR	TB
01102NXE	NXE	5,0	35,0	14,0	LI	NBR	F
01103B	B	108,0	133,3	9,5	LI	NBR	TB
01103GB	GB	108,0	133,3	9,5	LI	NBR	A
01104FE	FE	58,4		10,2		FELTRO	N
01107BR	BR	18,0	40,0	9,0	LI	NBR	TB
01109BR	BR	40,0	62,0	11,5	LI	NBR	TB
01109BRG	BRG	40,0	62,0	11,5	LI	NBR	TB
01110BR	BR	19,3	29,1	6,4	LI	NBR	TB
01111BRGE	BRGE (201)	46,0	65,5	9,0/13,2	LI	NBR	A
01112BR	BR	22,0	38,1	8,0	LI	NBR	TB
01113BRG	BRG	17,0	35,3	7,0	LI	NBR	TB
01116BR	BR	40,0	60,0	10,0	LI	NBR	TB
01118B	B	25,0	38,0	8,0	LI	NBR	TB
01119BAG	BAG	44,2	71,5	14,8	H	NBR	TB
01125BBO	BBO	63,5	89,9	22,2	LI	NBR	A
01129GAE	GAE (207)	20,0	47,0	10,0/12,7	LI	NBR	A
01129GRO	GRO	20,0	47,0	10,0/12,7	LI	NBR	A
01132GR	GR	111,3	142,8	4,8	LI	NBR	A
01135BR	BR	70,0	90,0	10,0	AH	NBR	TB
01135BRGS	BRG	70,0	90,0	10,0	AH	MVQ	TB
01135BRP	BR	70,0	90,0	10,0	AH	ACM	TB

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01135BRG	BRG	70,0	90,0	10,0	AH	NBR	TB
01135BRS	BR	70,0	90,0	10,0	AH	MVQ	TB
01140BR	BR	47,0	62,1	8,0	LI	NBR	TB
01141BR	BR	45,0	66,2	6,0	LI	NBR	TB
01147BRG	BRG	48,0	65,1	7,0	LI	NBR	TB
01148BR	BR	79,4	114,3	12,7	LI	NBR	TB
01149BR	BR	31,7	44,5	6,5	LI	NBR	TB
01149BA	BA	31,8	44,5	6,5	H	NBR	TB
01151BRG	BRG	26,0	42,0	10,0	LI	NBR	TB
01152GR	GR	35,0	46,5	4,8	LI	NBR	TB
01154B	B	31,7	44,5	9,5	LI	NBR	TB
01155B	B	40,0	55,0	9,0	LI	NBR	TB
01156GR	GR	25,4	44,6	5,0	LI	NBR	TB
01157BR	BR	34,0	62,1	10,0	LI	NBR	TB
01160BR	BR	65,0	80,0	8,0	LI	NBR	TB
01170BAE	BAE (162)	20,0	40,0	6,5	LI	NBR	A
01175BA	BA	15,9	25,4	6,4	LI	NBR	TB
01180BR	BR	55,0	85,0	13,0	LI	NBR	TB
01181BR	BR	55,0	70,0	8,0	LI	NBR	TB
01182BR	BR	30,0	72,0	9,5	LI	NBR	TB
01183BR	BR	75,0	105,0	13,0	LI	NBR	TB
01185BAX	BAX	82,5	114,3	14,3	LI	NBR	F
01187BR	BR	52,4	68,0	10,5	LI	NBR	TB
01188BR	BR	28,4	45,0	8,5	LI	NBR	TB
01189BR	BR	20,0	38,1	10,0	LI	NBR	TB
01193BR	BR	130,0	160,0	12,0	LI	NBR	TB
01194BR	BR	60,0	85,1	12,7	LI	NBR	TB
01195B	B	82,6	107,9	14,3	LI	NBR	TB
01199GB	GB	49,0	76,0	17,4	LI	NBR	A
01207BAG	BAG	45,0	67,9	12,0	LI	NBR	TB
01214BR	BR	24,0	37,0	7,0	LI	NBR	TB
01219BRGE	BRGE (197)	38,0	52,0	3,6/9	LI	NBR	A
01235BR	BR	19,0	42,1	7,0	LI	NBR	TB
01241BAG	BAG	49,0	65,0	10,0	LI	NBR	TB
01245BR	BR	20,0	40,0	6,0	LI	NBR	TB
01247BA	BA	55,0	76,0	12,0	LI	NBR	TB
01251BGO	BGO	92,1	123,9	21,0	LI	NBR	A
01252BGO	BGO	101,6	139,8	14,3	LI	NBR	A
01253B	B	89,0	114,3	12,7	LI	NBR	TB
01254BAG	BAG	20,7	34,9	11,9	LI	NBR	TB
01257B	B	95,3	120,6	12,7	LI	NBR	TB
01262BAG	BAG	49,0	68,0	12,0	LI	NBR	TB

Número Sabó Número Sabó Sabo Number	Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retén Altura Retén Width	Orientação Orientación Direction of Rotation	Material Iábio Material Labio Material	Grupo Grupo Group
01265BAG	BAG	40,0	56,0	9,0	LI	NBR	TB
01266BAG	BAG	40,0	65,0	12,0	LI	NBR	TB
01268BA	BA	105,0	142,9	12,7	LI	NBR	TB
01273BA	BA	30,0	62,0	10,1	LI	NBR	TB
01276GRE	GRE (220)	39,5	54,5	0,2	LI	NBR	A
01278BA	BA	54,0	65,0	8,0	LI	NBR	TB
01284B	B	38,1	50,3	11,1	LI	NBR	TB
01289GRE	GRE (220)	45,0	58,3	0,3	LI	NBR	A
01295GR	GR	25,0	40,0	5,0	LI	NBR	TB
01299BR	BR	28,6	38,1	6,0	LI	NBR	TB
01301BA	BA	79,0	111,6	10,7	LI	NBR	TB
01302B	B	25,4	47,6	11,1	LI	NBR	TB
01306GR	GR	44,5	63,4	4,8	LI	NBR	TB
01310BAG	BAG	32,0	42,0	7,0	LI	NBR	TB
01318B	B	38,0	70,0	12,7	LI	NBR	TB
01322BR	BR	40,0	62,1	10,0	LI	NBR	TB
01323GAE	GAE (46)	35,0	45,6	2,5/5,6	LI	NBR	A
01327BAG	BAG	25,4	38,0	9,5	LI	NBR	TB
01328BA	BA	20,0	31,2	7,5	H	NBR	TB
01340BR	BR	50,0	68,0	10,0	LI	NBR	TB
01341BR	BR	24,0	40,1	10,0	LI	NBR	TB
01343BAG	BAG	34,9	63,0	13,0	H	NBR	TB
01344BR	BR	45,0	65,0	12,0	LI	NBR	TB
01345BA	BA	60,3	85,1	6,4	LI	NBR	TB
01348BR	BR	15,0	30,0	10,0	LI	NBR	TB
01353BRG	BRG	32,0	51,9	12,0	LI	NBR	TB
01355BR	BR	38,1	50,1	7,0	LI	NBR	TB
01356BAG	BAG	25,4	38,1	6,3	LI	NBR	TB
01356GAO	GAO (118)	25,4	38,1	6,8/13,5	LI	NBR	A
01362B	B	133,4	165,1	15,9	H	NBR	TB
01366B	B	35,0	72,0	10,0	LI	NBR	TB
01369BA	BA	47,6	70,6	13,5	LI	NBR	TB
01370BA	BA	31,9	44,0	9,0	LI	NBR	TB
01371BAG	BAG	35,0	54,9	11,0	LI	NBR	TB
01375BR	BR	100,0	120,0	11,0	LI	NBR	TB
01377B	B	31,7	52,3	9,5	LI	NBR	TB
01378B	B	41,3	61,8	12,7	LI	NBR	TB
01386BRG	BRG	20,0	35,0	8,0	LI	NBR	TB
01389BAG	BAG	14,0	24,0	7,0	LI	NBR	TB
01392BAG	BAG	60,0	80,0	12,0	LI	NBR	TB
01393BA	BA	25,4	50,7	10,2	LI	NBR	TB
01395B	B	34,9	52,3	9,5	LI	NBR	TB

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01396BA	BA	38,1	55,6	6,4	LI	NBR	TB
01397BA	BA	25,0	45,0	7,0	LI	NBR	TB
01400BR	BR	18,0	47,0	8,0	LI	NBR	TB
01401BB	BB	24,6	46,4	14,7	LI	NBR	A
01402F	F	17,5		3,2		FELTRO	N
01404BR	BR	20,0	35,1	4,0	LI	NBR	TB
01405GA	GA	25,0	62,0	5,0	LI	NBR	TB
01407BR	BR	19,0	36,1	8,5	LI	NBR	TB
01408BA	BA	63,0	81,0	10,0	LI	NBR	TB
01412B	B	114,3	152,4	12,7	LI	NBR	TB
01415BRG	BRG	17,0	35,0	10,0	LI	NBR	TB
01416BAG	BAG	90,0	110,1	13,0	LI	NBR	TB
01419GA	GA	40,0	50,0	4,0	LI	NBR	TB
01420BR	BR	12,0	28,1	7,0	LI	NBR	TB
01421BR	BR	36,0	54,0	7,5	LI	NBR	TB
01422BR	BR	50,0	65,0	8,0	LI	NBR	TB
01423BR	BR	8,0	18,0	5,0	LI	NBR	TB
01424BR	BR	150,0	180,0	15,0	LI	NBR	TB
01425BA	BA	62,0	100,1	17,0	LI	NBR	TB
01427BR	BR	110,0	180,0	15,0	LI	NBR	TB
01432GA	GA	38,0	52,3	6,2	LI	NBR	TB
01434BAS	BA	36,0	54,0	7,5	LI	MVQ	TB
01445BA	BA	12,0	32,0	7,0	LI	NBR	TB
01454BGO	BGO	65,0	88,3	12,7	LI	NBR	A
01455BA	BA	19,0	28,7	4,7	LI	NBR	TB
01456BRE	BRE (121)	24,0	62,0	12,0	LI	NBR	A
01460B	B	47,6	82,8	11,0	LI	NBR	TB
01462B	B	63,5	110,0	13,0	LI	NBR	TB
01464BA	BA	17,0	31,2	7,5	LI	NBR	TB
01465BA	BA	19,0	41,3	11,0	LI	NBR	TB
01466MFBE	MFBE	114,0	174,4	16,0	ESTAMP.	S	
01468B	B	108,0	136,5	12,7	LI	NBR	TB
01479BR	BR	11,1	25,4	6,0	LI	NBR	TB
01481BA	BA	22,0	41,3	8,0	AH	NBR	TB
01483BA	BA	36,0	54,0	0,7	LI	NBR	TB
01489BGO	BGO	65,0	92,0	17,8	LI	NBR	A
01491BA	BA	40,2	52,0	7,0	LI	NBR	TB
01492B	B	17,0	40,0	8,5	LI	NBR	TB
01493BR	BR	15,9	28,5	7,0	LI	NBR	TB
01495BR	BR	28,0	40,0	7,0	LI	FPM	TB
01495BRF	BR	28,0	40,0	7,0	LI	FPM	TB
01495BRS	BR	28,0	40,0	7,0	LI	MVQ	TB

Número Sabó Número Sabo Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Grupo Grupo Group
01496BR	BR	17,5	28,3	7,0	LI	NBR	TB
01502BA	BA	35,0	44,5	7,0	LI	NBR	TB
01505BR	BR	42,0	65,1	10,0	LI	NBR	TB
01506BF	B	42,0	65,0	12,0	LI	FPM	TB
01507BR	BR	24,0	42,0	10,0	LI	NBR	TB
01508B	B	12,7	25,3	9,5	LI	NBR	TB
01509BR	BR	34,0	52,0	7,5	LI	NBR	TB
01511BR	BR	17,0	35,0	8,0	LI	NBR	TB
01515BR	BR	25,0	36,0	7,0	LI	NBR	TB
01519BR	BR	47,6	79,3	10,0	LI	NBR	TB
01526BRG	BRG	35,0	46,5	6,4	LI	NBR	TB
01527BA	BA	19,0	30,1	7,5	LI	NBR	TB
01532BR	BR	44,5	65,1	8,0	LI	NBR	TB
01534F	F	42,0		10,0		FELTRO	N
01535BR	BR	30,0	40,0	7,0	LI	NBR	TB
01536BA	BA	38,1	47,6	6,4	LI	NBR	TB
01539GA	GA	28,6	34,9	3,2	LI	NBR	TB
01541BAG	BAG	63,5	85,6	12,7	LI	NBR	TB
01543BA	BA	25,0	35,0	7,0	LI	NBR	TB
01543BR	BR	25,0	35,0	7,0	LI	NBR	TB
01546GRX	GRX	46,0	65,6	11,1	LI	NBR	F
01547BGO	BGO	25,4	50,8	15,8	LI	NBR	A
01549BR	BR	100,0	125,0	12,0	LI	NBR	TB
01549BRA	BRA	100,0	125,0	12,0	LI	NBR	TB
01550BR	BR	55,0	72,0	10,0	LI	NBR	TB
01550BRP	BR	55,0	72,0	10,0	LI	ACM	TB
01551BR	BR	35,0	58,0	10,0	LI	NBR	TB
01552BR	BR	44,0	60,0	10,0	LI	NBR	TB
01553BR	BR	45,0	72,0	9,5	LI	NBR	TB
01554BRG	BRG	22,0	32,0	7,0	LI	NBR	TB
01556BR	BR	25,0	40,0	8,0	LI	NBR	TB
01557BR	BR	55,0	70,1	11,5	LI	NBR	TB
01559BR	BR	12,7	22,2	8,0	LI	NBR	TB
01563BA	BA	32,0	47,5	6,4	LI	NBR	TB
01566BAO	BAO	20,0	30,0	4,0/7,0	LI	NBR	A
01571BRR	BBR (183)	82,6	107,9	16,0	LI	NBR	A
01575GGO	GGO	44,5	57,1	10,9	LI	NBR	A
01576BAG	BAG	16,0	22,1	6,4	LI	NBR	TB
01577BR	BR	25,0	37,1	7,3	LI	NBR	TB
01580B	B	28,0	42,0	7,0	LI	NBR	TB
01581BGO	BGO	30,0	72,0	10,0	LI	NBR	A
01587BR	BR	8,0	22,0	8,0	LI	NBR	TB

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01589BR	BR	33,0	52,0	6,0	LI	NBR	TB
01595BAGE	BAGE (256)	50,8	116,0	16,2	LI	NBR	L
01602BAG	BAG	40,0	72,0	12,0	LI	NBR	TB
01603BRG	BRG	33,0	50,0	6,0	H	NBR	TB
01604BR	BR	25,0	42,0	6,0	LI	NBR	TB
01608BR	BR	37,0	50,0	10,0	LI	NBR	TB
01613GA	GA	23,3	60,0	6,4	LI	NBR	TB
01625BR	BR	27,0	42,0	10,0	LI	NBR	TB
01630BAG	BAG	31,7	42,8	7,9	LI	NBR	TB
01632FE	FE (83)	104,8		3,2	FELTRO	N	
01633ME	ME (A)	111,3	174,5	4,0	ESTAMP.	O	
01635BR	BR	28,6	57,2	9,5	LI	NBR	TB
01637GA	GA	55,1	82,0	10,0	LI	NBR	TB
01651MFE	MFE (C)	25,4		6,5/10		M	
01656BR	BR	44,5	70,0	10,0	LI	NBR	TB
01657BA	BA	38,0	57,0	7,0	LI	NBR	TB
01659BA	BA	38,1	50,8	9,5	LI	NBR	TB
01660BAGE	BAGE (239)	39,4	80,2	6,4/11,8	H	NBR	A
01661BAG	BAG	28,6	43,0	9,5	LI	NBR	TB
01662GAE	GAE	9,0	16,0	9/15,0	LI	NBR	A
01666BR	BR	24,0	36,0	6,0	LI	NBR	TB
01667BR	BR	30,0	42,1	8,0	LI	NBR	TB
01669BR	BR	55,0	100,0	12,7	LI	NBR	TB
01671GA	GA	50,8	65,1	12,7	LI	NBR	TB
01672BR	BR	10,0	22,0	7,0	LI	NBR	TB
01673BA	BA	75,0	95,0	5,0	LI	NBR	TB
01676BR	BR	185,0	210,0	13,0	LI	NBR	TB
01677BR	BR	15,0	30,0	7,0	LI	NBR	TB
01678GRX	GRX	39,7	68,2	13,0	LI	NBR	F
01679BRG	BRG	44,5	68,2	15,9	LI	NBR	TB
01679BRGS	BRG	44,5	68,2	15,9	LI	MVQ	TB
01680F	F	31,0	45,2	6,4	FELTRO	N	
01683GA	GA	26,3	33,3	3,2	LI	NBR	TB
01684BRGGG	BRGGG	40,0	62,0	12,0	LI	NBR	A
01685BR	BR	6,4	19,1	6,4	LI	NBR	TB
01687BA	BA	74,9	100,0	13,0	H	NBR	TB
01689GB	GB	66,7	101,6	17,4	LI	NBR	A
01692MFE	MFE (A)	19,0	26,8	6,0		M	
01694BAP	BA	20,0	40,0	4,0	LI	ACM	TB
01695BR	BR	30,0	47,0	6,0	LI	NBR	TB
01698B	B	31,7	50,3	11,1	LI	NBR	TB
01699BR	BR	47,6	69,9	9,5	LI	NBR	TB

Número Sabó Número Sabó Sabo Number	Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retén Altura Retén Width	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Grupo Grupo Group
01700GR	GR	15,9	30,3	4,5	LI	NBR	TB
01703GR	GR	31,7	51,0	5,0	LI	NBR	TB
01707BRG	BRG	40,0	55,0	8,0	LI	NBR	TB
01710BAG	BAG	38,0	74,0	11,0	LI	NBR	TB
01711BRG	BRG	45,0	64,0	9,0	LI	NBR	TB
01712BAG	BAG	24,6	39,9	8,0	LI	NBR	TB
01715BR	BR	32,0	43,0	7,0	LI	NBR	TB
01716BR	BR	22,0	35,0	7,0	LI	NBR	TB
01717GA	GA	14,0	23,9	6,0	LI	NBR	TB
01718BR	BR	20,0	34,1	7,0	LI	NBR	TB
01721BR	BR	100,0	130,0	12,0	LI	NBR	TB
01721BRGP	BRG	100,0	130,0	12,0	LI	ACM	TB
01722BAE	BAE (161)	24,6	44,5	1,5/7,9	LI	NBR	A
01723BAE	BAE (161)	19,9	44,4	1,6/7,9	LI	NBR	A
01724BAE	BAE (161)	27,0	42,7	1,2/7,9	LI	NBR	A
01725BR	BR	17,0	32,0	7,0	LI	NBR	TB
01726BR	BR	32,0	45,0	6,0	LI	NBR	TB
01727BR	BR	22,0	32,0	5,5	LI	NBR	TB
01735BG	BG	125,0	150,0	15,0	BI	NBR	A
01735BE	BE	125,0	150,0	15,0	LI	NBR	A
01735BG	BG	125,0	150,0	15,0	LI	NBR	A
01737BRF	BR	11,0	17,0	4,0	LI	FPM	TB
01737BR	BR	11,0	17,0	4,0	LI	NBR	TB
01738B	B	45,0	60,0	10,0	LI	NBR	TB
01739B	B	110,3	133,3	12,0	LI	NBR	TB
01740B	B	50,0	65,0	10,0	LI	NBR	TB
01741GE	GE (245)	10,0	19,4	2,3/7,5	LI	NBR	A
01742BR	BR	35,0	52,1	10,0	LI	NBR	TB
01743BS	B	30,0	52,0	9,0	LI	MVQ	TB
01744B	B	32,0	52,0	9,0	LI	NBR	TB
01745BR	BR	40,0	55,2	10,0	LI	NBR	TB
01746B	B	20,0	42,0	10,0	LI	NBR	TB
01747G	G (253)	10,7		1,5/2,5		NBR	H
01751BRG	BRG	27,0	40,0	7,0	LI	NBR	TB
01755BA	BA	60,2	85,8	9,5	BI	NBR	TB
01756GGO	GGO (218)	44,5	59,3	6,0	LI	NBR	A
01759GR	GR	40,0	56,0	8,5	LI	NBR	TB
01760GR	GR	45,0	62,0	8,0	LI	NBR	TB
01762BAGF	BAG	68,0	90,0	13,0	AH	FPM	TB
01764BRG	BRG	46,0	65,5	7,0	LI	NBR	TB
01764BAGG	BAGG	46,0	65,5	7/8,5	LI	NBR	A
01765BRE	BRE (190)	25,6	42,0	7,0/10,3	BI	NBR	A

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01767BR	BR	85,0	110,0	12,0	LI	NBR	TB
01769BR	BR	18,0	35,0	10,0	LI	NBR	TB
01770B	B	118,0	140,0	13,0	LI	NBR	TB
01774BRG	BRG	105,0	135,0	15,0	LI	NBR	TB
01777GA	GA	20,0	35,0	4,5	LI	NBR	TB
01778GR	GR	26,0	40,0	5,0	LI	NBR	TB
01779B	B	22,0	47,0	9,0	LI	NBR	TB
01783BRG	BRG	50,0	65,0	8,5	LI	NBR	TB
01784BRO	BRO (205)	17,0	28,0	8,0	LI	NBR	A
01785GA	GA	26,8	30,0	1,9	LI	NBR	TB
01786BRG	BRG	38,0	53,1	8,5	LI	NBR	TB
01790B	B	63,5	82,5	12,7	LI	NBR	TB
01791BF	BF	87,3	114,3	22,2	LI	NBR/FE	A
01792BRE	BRE (189)	30,0	72,0	2,5/10,5	LI	NBR	A
01793BR	BR	48,0	66,1	12,0	LI	NBR	TB
01793BAE	BAE (80)	48,0	66,2	12,0	LI	NBR	L
01794BAGE	BAGE	52,0	114,0	13,0	LI	NBR	L
01795BAGE	BAGE	58,0	80,0	12,8	LI	NBR	L
01796MA	MA	52,4	61,2	11,5	LI	PA	D
01797NOP	NO (112)	11,0	17,0	8,7/12	LI	ACM	E
01798BAG	BAG	58,0	85,0	13,0	LI	NBR	TB
01799BRX	BRX	17,0	40,0	11,0	LI	NBR	F
01801B	B	100,0	123,8	13,0	LI	NBR	TB
01802BR	BR	42,0	62,0	6,0	LI	NBR	TB
01803BAG	BAG	38,1	50,4	11,0	LI	NBR	TB
01803GGO	GGO	38,1	50,4	11,0	LI	NBR	A
01805BE	BE (240)	100,0	128,0	0,6	LI	NBR	A
01806BRXE	BRXE	143,0	150,0	39,5	LI	NBR	F
01807BAG	BAG	50,0	70,0	12,0	LI	NBR	TB
01809BS	B	42,0	65,0	13,0	LI	MVQ	TB
01810BAGS	BAG	65,0	90,0	15,0	H	MVQ	TB
01810BRAGF	BRAG	65,0	90,0	15,0	H	FPM	TB
01811B	B	39,7	63,5	12,7	LI	NBR	TB
01814BRG	BRG	36,0	60,0	9,5	BI	NBR	TB
01815BAEP	BAE	9,0	15,0	14,0	LI	ACM	E
01816BA	BA	15,0	24,0	7,4	AH	NBR	TB
01817BA	BA	16,0	30,0	6,4	AH	NBR	TB
01818GAE	GAE (45)	17,8	30,0	11,0	AH	NBR	A
01819BA	BA	22,2	35,0	8,0	AH	NBR	TB
01821MFE	MFE (A)	60,0	75,0	5,0	Metal/ Feltro	M	
01822BAP	BA	130,0	160,0	13,0	LI	ACM	TB
01825BRG	BRG	54,0	76,0	8,0	AH	NBR	TB

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01826BRXE	BRXE (35)	8,0	35,0	16,0	LI	NBR	F
01828B	B	61,9	80,0	10,0	LI	NBR	TB
01829B	B	90,0	112,7	13,0	LI	NBR	TB
01830GA	GA	26,0	31,0	3,0	LI	NBR	TB
01831BA	BA	30,0	46,4	10,0	LI	NBR	TB
01832BR	BR	38,0	58,5	7,0	BI	NBR	TB
01833BA	BA	29,9	45,0	7,0	H	NBR	TB
01834BAGE	BAGE (16)	33,0	50,0	15,0	AH	NBR	A
01835BR	BR	14,3	24,0	7,0	LI	NBR	TB
01836B	B	23,8	38,1	7,9	LI	NBR	TB
01837BRGE	BRGE (194)	17,0	28,0	0,7	H	NBR	A
01838BAG	BAG	54,0	79,4	12,7	AH	NBR	TB
01839BA	BA	33,0	50,0	8,0	H	NBR	TB
01840BGO	BGO	48,0	65,0	12,0	AH	NBR	A
01841BRG	BRG	60,0	82,0	12,0	AH	NBR	TB
01842BRG	BRG	60,0	82,0	12,0	H	NBR	TB
01843BA	BA	31,7	44,5	7,0	H	NBR	TB
01844BAG	BAG	34,9	55,9	12,5	AH	NBR	TB
01845BRP	BR	44,5	63,5	9,5	H	ACM	TB
01846BAG	BAG	15,0	30,0	7,0	LI	NBR	TB
01847GR	GR	50,0	68,0	8,5	LI	NBR	TB
01849BAG	BAG	33,0	51,9	12,0	BI	NBR	TB
01849BAGE	BAGE (169)	33,0	51,9	0,3	BI	NBR	A
01850BRGE	BRGE (196)	38,0	52,0	2,5/8,5	LI	NBR	A
01851BRG	BRG	45,0	60,0	10,0	H	NBR	TB
01852BRS	BR	76,2	95,3	9,7	AH	MVO	TB
01853BR	BR	9,5	19,1	7,0	H	NBR	TB
01854BRG	BRG	38,1	60,4	12,7	H	NBR	TB
01855BAG	BAG	50,0	87,0	12,7	LI	NBR	TB
01856BRGP	BRG	75,9	95,0	11,3	AH	ACM	TB
01857B	B	76,2	98,5	11,9	LI	NBR	TB
01858BAGE	BAGE (173)	44,4	54,0	8,6	LI	NBR	A
01859BAG	BAG	44,5	61,9	9,5	H	NBR	TB
01860BA	BA	26,0	45,0	10,0	LI	NBR	TB
01861BRG	BRG	50,0	72,0	12,0	LI	NBR	TB
01862BAG	BAG	57,3	76,2	9,5	LI	NBR	TB
01863BA	BA	63,5	88,9	12,7	LI	NBR	TB
01864BAG	BAG	54,0	76,2	12,7	LI	NBR	TB
01865BGO	BGO	69,8	95,3	16,0	LI	NBR	A
01866GR	GR	20,0	35,1	5,8	LI	NBR	TB
01867GR	GR	23,8	39,0	6,2	LI	NBR	TB
01868GA	GA	19,0	28,5	4,0	LI	NBR	TB

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01869GA	GA	39,7	57,1	6,4	LI	NBR	TB	01911BRG	BRG	45,0	60,0	9,0	H	NBR	TB
01870GA	GA	63,5	76,2	6,4	LI	NBR	TB	01911BRGF	BRG	45,0	60,0	9,0	H	FPM	TB
01871GR	GR	17,5	30,3	4,5	LI	NBR	TB	01912BRG	BRG	85,7	114,2	11,2	LI	NBR	TB
01872GA	GA	57,2	76,0	9,5	LI	NBR	TB	01913MF	MF	44,5	66,6	12,7		Metal/ Feltro	M
01873GRE	GRE (219)	30,5	38,0	7,9	LI	NBR	A	01914BRP	BR	22,0	42,0	10,0	LI	ACM	TB
01874BRXE	BRXE (251)	74,5	80,1	22,0	LI	NBR	F	01915BAGP	BAG	15,0	30,0	6,0	LI	ACM	TB
01875BR	BR	14,0	32,0	10,0	LI	NBR	TB	01916BAGP	BAG	17,0	34,0	7,0	LI	ACM	TB
01876GRXE	GRXE	20,9	30,1	12,0	LI	NBR	F	01917BRGS	BRG	78,0	100,0	13,0	H	MVQ	TB
01877BAG	BAG	38,2	60,4	12,7	AH	NBR	TB	01918BRGE	BRGE (200)	44,0	65,0	2,5/12,2	LI	NBR	A
01878B	B	50,8	71,9	11,9	LI	NBR	TB	01922BR	BR	30,3	39,7	6,4	H	NBR	TB
01879BRG	BRG	70,0	95,0	13,0	AH	NBR	TB	01923BG	BG	82,5	114,3	12,7	BI	NBR	A
01880BAG	BAG	69,8	98,5	11,8	H	NBR	TB	01923BGG	BGG	82,5	114,3	12,7	BI	NBR	A
01880BAGE	BAGE (172)	69,8	98,5	11,8/17,7	H	NBR	A	01923BY	BY	82,5	114,3	12,7	BI	NBR	I
01881GOE	GOE	49,2	63,5	1,5/7,4	LI	NBR	A	01924BAEP	BAE	9,9	15,0	0,7	LI	ACM	E
01882GA	GA	36,6	41,8	3,0	LI	NBR	TB	01925GRE	GRE (43)	138,0	184,0	0,3	LI	NBR	A
01883BAG	BAG	21,0	32,0	7,0	LI	NBR	TB	01927RP	BR	70,0	90,5	10,0	AH	ACM	TB
01884BG	BG	120,0	145,0	15,0	BI	NBR	A	01928B	B	146,0	168,3	16,0	H	NBR	TB
01884BRAG	BRAG	120,0	145,0	15,0	BI	NBR	TB	01929BRG	BRG	15,0	24,0	7,0	LI	HNBR	TB
01885BAGP	BAG	120,0	140,2	13,0	H	ACM	TB	01929BAG	BAG	15,0	24,0	7,0	LI	NBR	TB
01886GR	GR	28,0	38,0	6,5	LI	NBR	TB	01930BAG	BAG	54,1	73,0	8,5	LI	NBR	TB
01889GAO	GAO (244)	15,0	35,0	10,0/12,7	LI	NBR	A	01931BAG	BAG	41,4	70,6	7,9	LI	NBR	TB
01890GAO	GAO (244)	25,0	52,0	10,0/12,7	LI	NBR	A	01932GRE	GRE (221)	59,0	79,7	9,7/11,8	LI	NBR	A
01891NEO	NEO (75)	47,0	56,8	14,0	LI	NBR	J	01933BABEP	BABE (54)	54,0	81,1	20,7	BI	ACM	A
01892BRG	BRG	25,0	37,9	7,0	LI	NBR	TB	01934BAG	BAG	15,9	30,0	6,0	H	NBR	TB
01893GE	GE	35,0	46,0	21,0	LI	NBR	D	01935BAG	BAG	20,0	30,0	7,0	LI	NBR	TB
01894BRG	BRG	19,9	35,0	7,0	LI	NBR	TB	01941GAE	GAE (47)	109,7	140,0	0,3	LI	NBR	A
01895BRG	BRG	29,9	52,0	8,0	LI	NBR	TB	01942BRGP	BRG	32,0	47,0	10,0	H	ACM	TB
01896BRE	BRE (190)	35,0	50,0	7/12,4	H	NBR	A	01943BAGEP	BAGE (115)	43,3	56,2	1,7	H	ACM	A
01897BRGE	BRGE	39,4	69,9	6,4/16,2	H	ACM	A	01945BRGS	BRG	82,0	105,0	12,0	AH	MVQ	TB
01898BRGE	BRGE	39,4	80,3	6,4/16,2	H	ACM	A	01949BR	BR	35,0	62,0	10,0	AH	NBR	TB
01899BRGE	BRGE (12)	42,9	65,0	9,5/15,0	BI	NBR	A	01950BAG	BAG	52,0	72,0	12,0	H	NBR	TB
01900GAE	GAE (214)	85,7	108,0	7,9/14,6	LI	NBR	A	01951BR	BR	160,0	200,0	12,0	LI	NBR	TB
01901BGO	BGO	101,8	127,1	11,9	LI	NBR	A	01952BA	BA	30,0	52,0	12,0	AH	NBR	TB
01902BR	BR	48,0	72,0	10,0	H	NBR	TB	01953BRG	BRG	133,0	160,0	15,0	AH	NBR	TB
01903BRP	BR	30,0	40,0	7,0	H	ACM	TB	01954BR	BR	35,0	80,0	12,0	H	NBR	TB
01904BRP	BR	10,0	22,0	7,0	H	ACM	TB	01955BAGS	BAG	47,6	63,5	11,0	BI	MVQ	TB
01905BR	BR	35,0	58,0	10,0	BI	NBR	TB	01957BA	BA	12,7	28,6	6,5	BI	NBR	TB
01906BA	BA	45,0	72,0	10,0	LI	NBR	TB	01958BAGS	BAG	40,5	54,0	7,2	BI	MVQ	TB
01907BR	BR	15,0	32,0	7,0	LI	NBR	TB	01959BAG	BAG	15,0	35,0	7,0	LI	NBR	TB
01909BR	BR	19,0	29,1	6,4	LI	NBR	TB	01962BA	BA	28,6	41,3	9,4	AH	NBR	TB
01910BRP	BR	150,0	180,0	13,0	H	ACM	TB	01963BAG	BAG	41,0	49,3	6,5	H	NBR	TB
01910BRS	BR	150,0	180,0	13,0	H	MVQ	TB	01964BA	BA	28,6	38,1	6,5	H	NBR	TB

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01965BAP	BA	19,0	35,0	10,3	BI	ACM	TB
01966BA	BA	12,7	25,4	6,4	BI	NBR	TB
01967BAS	BA	21,8	36,5	6,4	BI	MVQ	TB
01968BRS	BR	100,0	125,0	12,0	AH	MVQ	TB
01969BRGS	BRG	55,0	72,0	10,0	H	MVQ	TB
01972BRGS	BRG	133,3	158,8	13,0	AH	MVQ	TB
01973GA	GA	50,0	58,0	4,0	LI	NBR	TB
01974BRG	BRG	100,0	130,0	13,0	LI	NBR	TB
01975U	U (B)	31,0	47,0	12,0	LI	NBR	B
01976B	B	165,1	193,7	15,7	LI	NBR	TB
01977GR	GR	14,3	22,0	3,9	LI	NBR	TB
01978GROX	GROX	14,7	22,1	7,0	LI	NBR	F
01980BR	BR	35,0	55,0	8,0	LI	NBR	TB
01981BRGS	BRG	85,0	105,0	12,0	AH	MVQ	TB
01984GA	GA	7,8	14,1	3,6	LI	NBR	TB
01985BR	BR	21,0	32,0	7,0	LI	NBR	TB
01988BRG	BRG	40,0	52,0	7,4	LI	NBR	TB
01988BAGE	BAGE (171)	40,0	52,0	7,0	LI	NBR	A
01988BRGE	BRGE (199)	40,1	52,0	1,9/7,7	LI	NBR	A
01989BAG	BAG	41,3	59,1	8,0	BI	NBR	TB
01990G	G (253)	14,9		2,1/2,9		NBR	H
01991G	G (253)	27,0		2,5/3,3		NBR	H
01992BR	BR	30,3	39,7	6,4	H	NBR	TB
01993BR	BR	27,0	38,1	6,4	AH	NBR	TB
01994BR	BR	49,2	79,4	12,5	H	NBR	TB
01995BR	BR	58,7	79,4	9,6	H	NBR	TB
01996BRO	BRO	42,9	73,0	15,9	LI	NBR	A
01997BRO	BRO	39,4	60,3	12,7	LI	NBR	A
01998BR	BR	28,6	39,8	6,4	LI	NBR	TB
01999BRG	BRG	34,0	72,0	10,0	H	NBR	TB
02001GA	GA	10,3	16,0	4,0	LI	NBR	TB
02002U	U (B)	22,0	32,0	8,0	LI	NBR	B
02004BAGP	BAG	64,0	80,0	8,0	AH	ACM	TB
02005BAGP	BAG	40,0	56,0	7,0	H	ACM	TB
02006BAG	BAG	30,0	52,0	7,0	H	NBR	TB
02007BAGP	BAG	25,0	35,0	7,5	BI	ACM	TB
02008BAGE	BAGE (144)	16,0	26,0	20,0	LI	NBR	C
02009BP	B	22,0	40,0	8,0	H	ACM	TB
02010BAG	BAG	25,0	47,0	7,0	LI	NBR	TB
02010BRO	BRO	25,0	47,0	7,0	LI	NBR	A
02011NEF	NE	33,0	44,5	5,3	LI	FPM	J
02012BRF	BR	33,0	45,0	7,0	LI	FPM	TB

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retensor Altura Retén Width	Orientação Orientación Direction of Rotation	Material Iábio Material Labio Material	Grupo Grupo Group
02013BAP	BA	8,0	16,0	7,0	H	ACM	TB
02014BAGP	BAG	44,0	60,0	10,0	AH	ACM	TB
02017GB	GB	73,5	95,0	18,0	LI	NBR	A
02018BAGE	BAGE (42)	88,9	152,4	39,1	LI	NBR	A
02019BAGE	BAGE (42)	82,6	134,6	41,2	LI	NBR	A
02020S	S (150)	14,2	50,7	10,7/46,1	LI	NBR	R
02021B	B	108,2	144,5	19,0	BI	NBR	TB
02022GRGGO	GRGGO	20,0	35,0	11,0	LI	NBR	C
02023GRGGO	GRGGO	30,0	42,0	8,0	LI	NBR	C
02024BRGG	BRGG (202)	47,0	58,0	7,0	LI	NBR	A
02025BA	BA	14,0	20,0	3,5	LI	NBR	TB
02026GGGX	GGGX	52,4	74,7	8,4	LI	NBR	F
02027BGO	BGO	41,1	62,1	16,0	H	NBR	A
02029BR	BR	23,8	34,5	7,0	LI	NBR	TB
02031BR	BR	40,0	56,0	7,0	LI	NBR	TB
02032BA	BA	25,4	35,0	6,4	H	NBR	TB
02033BAE	BAE (235)	63,6	155,6	12,0	BI	NBR	L
02034BRG	BRG	38,1	63,6	12,7	H	NBR	TB
02035GB	GB	79,0	110,0	17,4	LI	NBR	A
02036GB	GB (217)	73,0	101,6	18,3	LI	NBR	A
02037GB	GB (217)	92,2	123,9	19,0	LI	NBR	A
02038BRG	BRG	39,4	63,6	12,7	BI	NBR	TB
02039BR	BR	42,0	72,0	10,0	AH	NBR	TB
02044BAGE	BAGE (256)	150,8	229,4	28,6	BI	NBR	L
02046BRG	BRG	25,0	47,0	10,0	LI	NBR	TB
02049BG	BG	100,0	120,0	13,0	BI	NBR	A
02051BR	BR	38,0	54,0	10,0	LI	NBR	TB
02052BAGP	BAG	31,7	54,0	6,5	LI	ACM	TB
02053BAGP	BAG	41,3	63,6	6,5	BI	ACM	TB
02054BR	BR	161,9	187,3	9,5	LI	NBR	TB
02055BR	BR	47,7	65,0	8,0	H	NBR	TB
02056BR	BR	165,0	190,5	12,7	LI	NBR	TB
02058BAGF	BAG	42,0	55,0	9,0	LI	FPM	TB
02059BA	BA	42,0	58,0	7,0	LI	NBR	TB
02060GB	GB	97,8	116,0	16,0	LI	NBR	A
02061BRGF	BRG	70,0	90,0	15,0	H	FPM	TB
02062BA	BA	25,0	40,0	7,0	LI	NBR	TB
02063BAG	BAG	31,7	50,8	11,1	LI	NBR	TB
02064BAG	BAG	22,2	50,8	11,1	LI	NBR	TB
02065BAE	BAE (236)	190,5	285,8	48,7	BI	NBR	L
02066BAG	BAG	57,2	73,0	8,0	BI	NBR	TB
02067BAG	BAG	57,1	76,1	11,0	BI	NBR	TB

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Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.  
Before specifying the use of a retainer, please check for availability • 0800 7712155

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02068BRGP	BRG	40,0	52,0	9,0	BI	ACM	TB
02069BRGS	BRG	130,0	160,0	15,0	AH	MVQ	TB
02070BBO	BBO (180)	20,0	38,1	18,3	LI	NBR	A
02071BRGE	BRGE (56)	38,5	45,6	8/14,7	LI	NBR	A
02072BAP	BA	20,0	38,1	6,4	LI	ACM	TB
02073GA	GA	21,8	25,0	1,9	LI	NBR	TB
02075BREP	BRE (192)	20,0	35,0	7,0/10,6	H	ACM	A
02077BAG	BAG	60,3	79,4	9,5	H	NBR	TB
02084BAGP	BAG	41,2	63,5	8,0	H	ACM	TB
02085BA	BA	69,9	88,9	12,7	AH	NBR	TB
02087BAG	BAG	35,0	56,0	10,0	BI	NBR	TB
02088BGO	BGO	40,0	65,0	12,0	BI	NBR	A
02089BGOE	BGOE	139,7	160,3	31,7	LI	NBR	A
02090BABE	BABE (54)	60,3	85,8	22,8	BI	NBR	A
02091BAG	BAG	35,0	62,0	12,0	BI	NBR	TB
02092BGO	BGO	117,5	146,0	14,3	BI	NBR	A
02093BRG	BRG	150,8	177,8	12,5	LI	NBR	TB
02094BAGE	BAGE (173)	28,0	40,0	10,5	LI	NBR	A
02095GA	GA	35,0	42,0	4,0	LI	NBR	TB
02096BA	BA	30,0	37,1	4,0	LI	NBR	TB
02097BREP	BRE (109)	8,0	14,1	7,1/10,4	LI	ACM	E
02098BAE	BAE (234)	60,3	149,4	8,3	BI	NBR	L
02099BA	BA	36,0	54,0	7,0	H	NBR	TB
02100BAG	BAG	58,0	75,0	12,0	AH	NBR	TB
02102BA	BA	34,9	50,9	8,3	H	NBR	TB
02103BAG	BAG	57,2	82,5	9,5	AH	NBR	TB
02103BAGE	BAGE (227)	57,2	82,5	9,5/11,5	AH	NBR	A
02104BA	BA	44,5	63,6	8,0	H	NBR	TB
02106GA	GA	28,0	40,0	5,0	LI	NBR	TB
02107GA	GA	25,0	35,0	5,0	LI	NBR	TB
02108BRG	BRG	50,0	68,0	9,0	LI	NBR	TB
02110BRG	BRG	45,0	62,0	9,0	LI	NBR	TB
02111BRG	BRG	55,0	72,0	9,0	LI	NBR	TB
02112BRG	BRG	58,0	75,0	9,0	LI	NBR	TB
02113BR	BR	65,0	100,0	13,0	AH	NBR	TB
02115BRGS	BRG	122,2	140,8	11,8	AH	MVQ	TB
02116BAP	BA	60,3	82,5	11,0	H	ACM	TB
02117BAS	BA	101,6	126,9	11,2	AH	MVQ	TB
02118BREP	BRE (113)	8,0	14,1	7,1/10,4	LI	ACM	E
02125BGP	BG	95,3	114,3	12,0	AH	ACM	A
02126GA	GA	22,1	35,0	8,0	LI	PU	TB
02127BGP	BG	76,2	101,7	11,0	H	ACM	A

Número Sabó Número Sabó Sabo Number	Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retén Altura Retén Width	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Grupo Group
02128BA	BA	38,0	62,0	7,0	LI	NBR	TB
02130BAG	BAG	15,0	21,0	4,0	LI	NBR	TB
02131BAG	BAG	19,0	28,6	6,5	LI	NBR	TB
02132BRES	BRE (193)	22,3	35,7	3,7/10	H	MVQ	A
02134BGE	BGE (184)	117,4	157,1	13,5/26,5	BI	NBR	A
02135GA	GA	10,0	14,0	3,0	LI	NBR	TB
02138B	B	174,6	200,0	16,0	LI	NBR	TB
02139BRG	BRG	48,0	72,0	7,0	LI	NBR	TB
02140BAP	BA	28,7	40,0	7,0	H	ACM	TB
02142BRGF	BRG	32,0	47,0	10,0	BI	FPM	TB
02143BRGGG	BRGGG	21,0	37,0	7,0/10,0	LI	NBR	A
02144GR	GR	32,0	43,0	5,0	LI	NBR	TB
02145BRG	BRG	28,0	42,0	7,0	LI	NBR	TB
02148BRG	BRG	25,0	40,0	9,0	LI	NBR	TB
02151BA	BA	35,0	80,0	6,0	LI	NBR	TB
02152BAGGG	BAGGG	34,0	55,0	11,0/15,0	LI	NBR	A
02153BRG	BRG	29,4	42,8	8,0	LI	NBR	TB
02155BRGE	BRGE (198)	39,4	80,1	6,4/16,2	AH	NBR	A
02156BAGF	BAG	125,0	150,0	15,0	AH	FPM	TB
02157BRO	BRO	28,0	40,0	8,0	LI	NBR	A
02160BR	BR	10,0	22,0	7,0	H	NBR	TB
02161BR	BR	17,0	25,0	4,0	LI	NBR	TB
02162BRG	BRG	14,0	24,0	6,0	LI	NBR	TB
02163BRG	BRG	8,0	18,0	5,0	LI	NBR	TB
02164BRG	BRG	18,0	37,0	8,0	LI	NBR	TB
02165GRGG	GRGG	26,0	42,0	8,0	LI	NBR	A
02166BRG	BRG	6,8	22,0	7,0	LI	NBR	TB
02167GAE	GAE (49)	29,5	37,0	7,5	LI	NBR	A
02169BA	BA	45,0	62,0	7,0	LI	NBR	TB
02171BR	BR	10,0	19,0	6,5	LI	NBR	TB
02172BG	BG	25,4	38,1	8,0	LI	NBR	A
02175BRGP	BRG	45,0	60,0	8,0	BI	ACM	TB
02176BRG	BRG	16,0	24,0	6,0	LI	NBR	TB
02178BRGS	BRG	35,0	48,0	7,0	H	MVQ	TB
02180BG	BG	114,3	155,6	14,0	BI	NBR	A
02181BAG	BAG	55,5	80,9	15,5	H	NBR	TB
02184BAGP	BAG	32,0	65,0	13,0	AH	ACM	TB
02185BAGF	BAG	140,0	165,0	15,0	AH	FPM	TB
02191BRF	BR	75,0	95,0	12,0	AH	FPM	TB
02192BRGP	BRG	70,0	90,0	10,0	BI	ACM	TB
02193BRG	BRG	57,1	76,2	12,7	LI	NBR	TB
02194GB	GB	101,6	127,0	16,0	LI	NBR	A

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02195BR	BR	105,0	140,0	12,0	BI	NBR	TB
02196BR	BR	44,3	81,0	12,5	LI	NBR	TB
02197BRG	BRG	54,0	73,0	9,5	AH	NBR	TB
02198GR	GR	7,8	13,8	3,6	LI	NBR	TB
02199BAGF	BAG	75,0	100,0	17,0	H	FPM	TB
02201BRGE (14)	BRGE (14)	47,6	80,3	6,5/16,5	H	ACM	A
02203BAG	BAG	18,8	31,7	11,0	LI	NBR	TB
02204BAGP	BAG	60,3	90,0	12,5	LI	ACM	TB
02205BAGP	BAG	54,0	90,0	12,5	BI	ACM	TB
02206BAGP	BAG	60,3	79,4	12,0	BI	ACM	TB
02207BAGP	BAG	54,0	73,0	11,0	BI	ACM	TB
02208BAGP	BAG	90,0	120,0	12,0	BI	ACM	TB
02209BAGE	BAGE (174)	47,6	80,0	13,0/26,0	BI	NBR	A
02210BRG	BRG	24,0	37,0	7,0	LI	NBR	TB
02211BAG	BAG	63,5	83,8	9,0/11,5	BI	NBR	A
02212BRGE	BRGE (196)	40,0	52,0	2,8/8,5	LI	NBR	A
02213B	B	98,4	126,9	12,0	LI	NBR	TB
02214B	B	114,3	139,7	12,7	LI	NBR	TB
02215BG	BG	31,8	44,5	8,0	LI	NBR	A
02216GAG	GAG	17,8	32,2	5,5	LI	NBR	A
02219BAGF	BAG (17)	155,0	180,0	0,6	BI	FPM	A
02221BA	BA	34,9	50,8	8,3	LI	NBR	TB
02223B	B	140,0	180,0	15,0	LI	NBR	TB
02224BR	BR	35,0	56,0	10,0	AH	NBR	TB
02225BR	BR	40,0	68,0	12,0	AH	NBR	TB
02226BG	BG	75,0	100,0	13,0	BI	NBR	A
02230B	B	25,4	38,0	6,5	LI	NBR	TB
02231GAO	GAO (244)	25,0	62,0	10,0/13,0	LI	NBR	A
02232GAO	GAO (244)	20,0	52,0	10,0/13	LI	NBR	A
02233BRG	BRG	25,0	40,0	8,0	BI	NBR	TB
02234BRG	BRG	30,0	42,0	10,0	LI	NBR	TB
02235BAGS	BAG	80,0	100,0	12,0	H	MVO	TB
02236BAP	BA	57,0	85,0	12,0	BI	ACM	TB
02239GAE	GAE (208)	11,0	16,6	6/8,5	LI	NBR	A
02241GRG	GRG	25,0	47,0	8,0	LI	NBR	A
02242BG	BG	33,3	54,0	11,0	H	NBR	A
02244B	B	29,0	50,0	10,0	AH	NBR	TB
02245BAG	BAG	133,4	155,6	14,0	BI	NBR	TB
02246BAG	BAG	168,0	188,0	31,5	BI	NBR	TB
02248GA	GA	9,4	21,4	5,0	LI	NBR	TB
02249GA	GA	12,6	21,4	5,0	LI	NBR	TB
02255GA	GA	63,9	73,0	3,2	LI	NBR	TB

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material Labio Material Labio Material	Grupo Grupo Group
02256BAG	BAG	63,6	88,9	13,5	BI	NBR	TB
02257GAE	GAE (62)	31,7	44,5	1,5/5,9	LI	NBR	A
02258GAE	GAE (63)	22,0	32,0	1,9/5	LI	NBR	A
02259GAG	GAG (103)	26,0	34,0	5,0	LI	NBR	A
02261GAE	GAE (210)	25,0	35,0	5,0/7,0	LI	NBR	A
02262BAG	BAG	50,8	65,1	12,7	LI	NBR	TB
02263BR	BR	19,0	31,6	7,7	LI	NBR	TB
02264BRGF	BRG	85,9	104,0	11,0	AH	FPM	TB
02265GA	GA	25,0	32,0	4,0	LI	NBR	TB
02267BBO	BBO (180)	60,3	85,8	23,8	LI	NBR	A
02269BAGP	BAG	70,0	85,0	8,0	AH	ACM	TB
02270B	B	32,0	72,0	10,0	BI	NBR	TB
02271BGP	BG	66,7	92,0	11,0	BI	ACM	A
02272BGP	BG	66,7	85,6	12,0	BI	ACM	A
02274BRX	BRX	48,0	80,0	13,0	LI	NBR	F
02279BAG	BAG	15,0	26,0	6,0	LI	NBR	TB
02281BAE	BAE (146)	8,9	16,0	7,0	H	NBR	A
02283BRGF	BRG	85,0	105,0	12,0	AH	FPM	TB
02285BA	BA	20,0	31,0	7,0	LI	NBR	TB
02287BGP	BG	54,0	79,4	9,5	BI	ACM	A
02289BAG	BAG	38,0	74,0	11,0	H	NBR	TB
02291BAF	BA	80,0	100,0	12,0	H	FPM	TB
02292BAF	BA	68,0	90,0	10,0	AH	FPM	TB
02293BF	B	145,0	175,0	13,0	BI	FPM	TB
02295BA	BA	44,0	58,0	7,0	LI	NBR	TB
02296BRG	BRG	42,0	60,0	9,0	AH	NBR	TB
02297BAGF	BAG	70,0	85,0	8,0	AH	FPM	TB
02298BRG	BRG	45,0	62,0	9,0	AH	NBR	TB
02299BAGE	BAG	93,0	157,0	4,0	LI	NBR	TB
02302BAGF	BAG	40,0	56,0	7,0	H	FPM	TB
02303BRG	BRG	35,0	63,1	14,0	LI	NBR	TB
02304BRG	BRG	35,0	60,3	9,5	LI	NBR	TB
02305BAG	BAG (130)	46,3	66,6	0,8/6,7	BI	NBR	A
02306BRG	BRG	6,5	14,5	7,0	LI	NBR	TB
02307NEP	NE (34)	5,5	9,2	0,9	LI	ACM	E
02308BRG	BRG	14,0	28,0	7,0	LI	NBR	TB
02309BRP	BR	15,0	25,0	7,0	AH	ACM	TB
02310BRG	BRG	16,0	28,0	7,0	LI	NBR	TB
02311BR	BR	20,0	34,0	7,0	AH	NBR	TB
02312BRGE	BRGE (21)	27,0	39,0	10,5	LI	NBR	C
02315GA	GA	34,9	53,5	6,5	LI	NBR	TB
02316GA	GA	57,2	82,6	6,5	LI	NBR	TB

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02317BRGF	BRG	31,0	50,0	8,0	H	FPM	TB
02317BRAGF	BRAG	31,0	50,0	8,0	H	FPM	A
02318BRGE	BRGE (21)	30,0	40,5	10,5	LI	NBR	C
02319BRGE	BRGE (58)	15,0	21,0	0,1	LI	NBR	A
02321BAG	BAG	42,0	56,0	7,0	LI	NBR	TB
02322GA	GA	40,8	44,1	3,1	LI	NBR	TB
02324BRG	BRG	45,0	65,0	8,0	LI	NBR	TB
02325BRGP	BRG	90,0	115,0	13,0	AH	ACM	TB
02326BRGP	BRG	58,0	80,0	12,0	H	ACM	TB
02327BREP	BRE (109)	8,0	13,0	7,5/9,3	LI	ACM	E
02328GE	GE	35,0	40,0	26,0	LI	NBR	D
02329BRG	BRG	18,0	30,0	7,0	LI	NBR	TB
02333BAE	BAE (234)	60,3	155,5	7,4	BI	NBR	L
02334BAG	BAG	14,3	39,6	6,3	LI	NBR	TB
02335BAG	BAG	15,9	22,2	4,3	LI	NBR	TB
02336BROE	BROE	35,0	45,2	0,6	LI	NBR	A
02337GA	GA	28,6	40,2	5,0	LI	NBR	TB
02342GA	GA	51,0	58,0	4,0	LI	NBR	TB
02343BAP	BA	12,7	22,2	8,0	LI	ACM	TB
02345BRAGF	BRAG	77,0	100,1	11,5	AH	FPM	A
02347GRE	GR	105,0	135,0	12,0	LI	NBR	TB
02351BAGE	BAGE (172)	80,0	112,0	12,0/18,0	H	NBR	A
02352B	B	85,7	107,9	12,7	LI	NBR	TB
02353BRGE	BRGE (21)	35,0	48,0	10,5	LI	NBR	C
02354GAE	GAE (209)	12,5	28,6	9,0	LI	NBR	A
02355BA	BA	28,6	41,3	6,5	H	NBR	TB
02356BA	BA	41,3	54,0	6,5	LI	NBR	TB
02357BA	BA	22,2	31,7	6,0	AH	NBR	TB
02358BA	BA	7,0	16,0	7,0	LI	NBR	TB
02360BRF	BR	12,5	20,0	5,0	BI	FPM	TB
02361GA	GA	28,7	31,8	3,1	LI	NBR	TB
02365BAG	BAG	47,8	65,0	11,7	H	NBR	TB
02366BAGE	BAGE (172)	69,8	98,5	11,8/17,8	AH	NBR	A
02368GAE	GAE (211)	45,0	61,9	5,5/10	LI	NBR	A
02370BRAGE	BRAGE	35,0	54,0	10,0/15,0	BI	NBR	A
02371BAG	BAG	21,0	32,0	7,5	H	NBR	TB
02372BAG	BAG	23,0	35,0	8,0	H	NBR	TB
02373BRG	BRG	13,0	26,0	7,0	LI	NBR	TB
02374BAGE	BAGE (61)	35,0	54,9	0,7/14,7	BI	NBR	A
02375BR	BR	17,0	28,1	5,0	LI	NBR	TB
02376BRG	BRG	30,0	47,0	7,0	AH	NBR	TB
02377BG	BG	40,0	62,0	12,0	LI	NBR	A

Número Sabó Número Sabó Sabo Number	Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Grupo Grupo Group
02378BR	BR	44,3	60,0	7,0	LI	NBR	TB
02380BRXE	BRXE (252)	8,0	35,0	13,0	LI	NBR	F
02381BA	BA	57,2	82,5	9,5	BI	NBR	TB
02382BREP	BRE (32)	7,0	10,9	6,4/11	LI	ACM	E
02385BA	BA	38,1	47,6	7,0	H	NBR	TB
02386BG	BG	108,0	133,4	12,0	BI	NBR	A
02388GRG	GRG (224)	30,0	72,3	0,2	LI	NBR	A
02391BRG	BRG	40,0	55,0	8,0	BI	NBR	TB
02392BRGE	BRGE (13)	55,0	70,0	6,0/10,3	BI	NBR	A
02393BAGE	BAGE (172)	54,0	79,4	12,7/19,0	AH	NBR	A
02395BAGG	BAGG	45,0	73,1	13,0	BI	NBR	A
02396BREF	BRE (108)	8,0	12,0	0,6	LI	FPM	E
02397BRG	BRG	32,0	45,0	7,0	AH	NBR	TB
02398BAGS	BAG	70,0	85,0	8,0	AH	MVQ	TB
02399BRGS	BRG	64,0	90,0	10,0	H	MVQ	TB
02400BREF	BRE (111)	8,0	14,1	13,8/13	LI	FPM	E
02401B	B	30,0	52,0	9,0	LI	NBR	TB
02407BA	BA	29,9	58,1	8,0	BI	NBR	TB
02410GRG	GRG (224)	40,0	90,2	0,2	LI	NBR	A
02411GRG	GRG (224)	25,0	52,0	0,1	LI	NBR	A
02412BRG	BRG	26,0	40,0	8,0	H	NBR	TB
02413BRG	BRG	28,0	40,0	8,0	H	NBR	TB
02414BRG	BRG	25,0	35,0	8,0	H	NBR	TB
02415BAG	BAG	55,4	76,2	12,7	LI	NBR	TB
02416BAG	BAG	82,5	120,0	15,0	BI	NBR	TB
02417BAGE	BAGE (172)	60,3	92,0	12,0/18,5	AH	NBR	A
02418BRP	BR	21,5	40,0	7,0	H	ACM	TB
02419BAG	BAG	40,0	55,0	9,5	BI	NBR	TB
02420BAGE	BAGE (26)	15,5	28,0	0,4	LI	NBR	C
02422BRP	BR	69,8	90,0	8,0	BI	ACM	TB
02423BAG	BAG	69,8	90,0	10,0	LI	NBR	TB
02424BG	BG	89,0	114,3	12,7	LI	NBR	A
02425BR	BR	17,0	32,0	7,0	LI	NBR	TB
02426BRG	BRG	58,0	75,0	9,0	AH	NBR	TB
02430BRGF	BRG	40,0	52,0	8,0	H	FPM	TB
02432GR	GR (248)	17,0	39,7	3,3	LI	NBR	C
02433BRG	BRG	20,0	39,7	6,5	LI	NBR	TB
02434BRE	BRE (188)	25,0	35,0	3,8/7,5	LI	NBR	A
02435GRG	GRG	50,0	117,5	23,2	LI	NBR	A
02438BRG	BRG	39,4	63,6	12,5	AH	NBR	TB
02441GRG	GRG	15,0	22,0	4,0	LI	NBR	A
02442BAGE	BAGE (172)	50,0	65,0	14,0	BI	NBR	A

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02444GA	GA	38,0	43,0	3,0	LI	NBR	TB
02445BR	BR	68,0	90,0	10,0	LI	NBR	TB
02448BRAGF	BRAG	60,3	82,5	11,0	H	FPM	A
02449BRGF	BRG	122,2	140,8	12,0	AH	FPM	TB
02450BRGP	BRG	90,1	110,0	13,0	H	ACM	TB
02451BRG	BRG	75,0	90,0	10,0	LI	NBR	TB
02454BRG	BRG	15,0	25,0	7,0	LI	NBR	TB
02456BRGS	BRG	35,0	50,0	8,0	H	MVQ	TB
02461BRGE	BRGE (21)	28,5	39,8	8,0	LI	NBR	C
02464BRO	BRO	94,7	120,0	12,0	LI	NBR	A
02465BAG	BAG	23,8	38,1	6,5	LI	NBR	TB
02467BAGFP	BAGF	23,0	37,0	13,5	BI	ACM	A
02468BRG	BRG	20,0	40,0	7,0	LI	NBR	TB
02469GRG	GRG	40,0	50,0	5,0	LI	NBR	A
02474BRG	BRG	11,1	22,2	6,5	LI	NBR	TB
02478BAGF	BAG	63,5	82,6	12,7	AH	FPM	TB
02480BAGP	BAG	20,6	38,1	7,0	LI	ACM	TB
02481BRAGF	BRAG	35,0	65,0	8,0	BI	FPM	A
02482GRG	GRG	34,5	46,5	6,5	LI	NBR	A
02483BGE	BGE (184)	88,9	115,4	16,2/19,2	BI	NBR	A
02484BGE	BGE (184)	88,9	123,0	18,7/21,7	BI	NBR	A
02485BY	BY	98,4	144,5	16,0	BI	NBR	I
02486BR	BR	20,0	35,0	7,0	LI	NBR	TB
02490BY	BY (69)	142,8	182,5	24,0	BI	NBR	I
02491GR	GR	8,0	15,0	3,0	LI	NBR	TB
02492GR	GR	16,0	22,0	3,0	LI	NBR	TB
02494BRAGF	BRAG	42,0	72,0	10,0	H	FPM	A
02495BRF	BR	8,0	14,0	3,0	LI	FPM	TB
02496BY	BY	127,0	158,8	16,0	BI	NBR	I
02497BRGF	BRG	54,0	77,7	11,0	AH	FPM	TB
02498BRGF	BRG	63,5	88,9	11,0	H	FPM	TB
02499BRGF	BRG	69,8	92,0	11,0	AH	FPM	TB
02504BAGP	BAG	63,5	82,6	12,7	AH	ACM	TB
02505BA	BA	38,0	47,6	6,5	LI	NBR	TB
02506BR	BR	38,0	52,3	7,0	LI	NBR	TB
02509BREF	BRE (108)	7,0	11,0	7,0	LI	FPM	E
02510GA	GA	18,0	24,0	3,0	LI	NBR	TB
02511BRAGF	BRAG	66,7	88,8	11,0/12,5	H	FPM	A
02512BRGE	BRGE (67)	57,2	82,6	0,9/14	AH	NBR/ACM	A
02513BREF	BRE (107)	9,5	15,9	8,2/12,6	LI	FPM	E
02515GR	GR	6,0	10,0	2,5	LI	CR	TB
02516BRGE	BRGE (154)	47,6	68,0	14,0	LI	ACM	A

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diámetro Eixo Diámetro Eje Shaft Diameter	Diámetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retensor Altura Retén Width	Orientação Orientación Direction of Rotation	Material Labio Material Labio Material	Grupo Grupo Group
02517BRXE	BRXE (36)	55,0	70,0	12,0	LI	NBR	F
02518BRXE	BRXE (36)	50,0	65,1	12,0	LI	NBR	F
02519BRG	BRG	28,0	40,0	8,0	LI	NBR	TB
02520GAE	GAE (62)	28,0	40,6	5,0	LI	NBR	A
02521GA	GA	40,8	44,1	3,2	LI	NBR	TB
02522GA	GA	45,6	48,8	3,2	LI	NBR	TB
02523BRF	BR	11,0	17,0	4,0	LI	FPM	TB
02524BRAGF	BRAG	80,0	98,0	10,0	AH	FPM	TB
02525BRAGF	BRAG	26,0	42,0	8,0	H	FPM	TB
02526GAG	GAG	20,0	28,0	4,0	LI	NBR	A
02527BAGP	BAG	25,4	44,5	6,5	BI	ACM	TB
02528GRL	GRL	35,6	50,8	7,8/9,6	LI	NBR	A
02529BRG	BRG	55,0	80,0	8,0	H	NBR	TB
02530BRG	BRG	65,0	85,0	10,0	LI	NBR	TB
02531BR	BR	75,0	95,0	10,0	BI	NBR	TB
02532BRGE	BRGE (21)	8,0	-	9,0	LI	NBR	C
02533BRGP	BRG	22,0	35,0	7,0	AH	ACM	TB
02534GAG	GAG	14,0	20,0	2,5	LI	NBR	A
02535BRG	BRG	12,0	22,0	5,0	LI	NBR	TB
02536BR	BR	8,0	14,0	3,0	LI	NBR	TB
02539BRGP	BRG	30,0	42,0	7,0	H	ACM	TB
02541BRGP	BRG	40,0	55,0	8,0	AH	ACM	TB
02544BREF	BRE (108)	8,0	10,8	10,3	LI	FPM	E
02545BROF	BRO	125,0	150,0	31,7	BI	FPM	A
02546BRO	BRO	70,0	86,0	10,0	BI	NBR	A
02547BRO	BRO	50,0	80,0	12,0	LI	NBR	A
02549BRP	BR	28,2	38,0	6,0	LI	ACM	TB
02556BAF	BA	68,0	85,0	10,0	H	FPM	TB
02557BRG	BRG	68,0	85,0	10,0	LI	NBR	TB
02558BAF	BA	47,6	57,2	5,0	H	FPM	TB
02560BGF	BG	69,9	92,3	12,7	AH	FPM	A
02561BRGE	BRGE (202)	60,3	92,0	2,5/14	H	ACM	A
02562BRGE	BRGE (202)	69,8	98,4	2,5/11,5	H	ACM	A
02565BGF	BG	38,0	50,4	11,0	H	FPM	A
02566BRGF	BRG	20,0	40,0	7,0	LI	FPM	TB
02567GR	GR	18,0	24,0	4,0	LI	NBR	TB
02568BRG	BRG	26,0	35,0	7,0	LI	NBR	TB
02568BRG	BRG	26,0	35,0	7,0	LI	NBR	TB
02569BRGP	BRG	14,0	22,0	4,0	LI	ACM	TB
02570BRGF	BRG	25,0	40,0	7,0	LI	FPM	TB
02571BRG	BRG	17,0	25,0	4,0	LI	NBR	TB
02572BRG	BRG	22,0	35,0	7,0	LI	NBR	TB

Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.  
Before specifying the use of a retainer, please check for availability • 0800 7712155

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02573GR	GR	20,0	26,0	4,0	LI	NBR	TB
02574BR	BR	90,0	110,0	12,0	BI	NBR	TB
02575BRAGF	BRAG	34,9	52,0	7,0	BI	FPM	TB
02576GAG	GAG (119)	14,2	28,6	13,5	LI	NBR	A
02578BRGF	BRG	60,4	79,4	9,3	H	FPM	TB
02579BRG	BRG	22,0	35,0	7,0	LI	NBR	TB
02580BAG	BAG	44,4	63,5	12,7	BI	NBR	TB
02581GAE	GAE (64)	47,0	63,0	5,6/11,2	LI	NBR	A
02583BRGF	BRG	133,3	158,8	13,0	AH	FPM	TB
02588GR	GR	25,0	32,0	4,0	LI	NBR	TB
02589GR	GR	15,0	21,0	3,0	LI	NBR	TB
02590NF	N (114)	9,5	14,3	10,7/14,3	LI	FPM	E
02591BRG	BRG	46,0	56,0	4,0	LI	NBR	TB
02592GAG	GAG	20,0	26,0	4,0	LI	NBR	A
02593BR	BR	30,0	47,0	6,0	AH	NBR	TB
02594BRF	BR	24,0	35,0	6,0	H	FPM	TB
02595BRF	BR	31,0	62,1	4,0/5,5	LI	FPM	A
02600BRAGF	BRAG	90,0	104,0	11,0	AH	FPM	A
02604BRGF	BRG	92,1	107,7	10,0	AH	FPM	TB
02606BAF	BA	85,0	105,0	10,0	H	FPM	TB
02607BRG	BRG	85,0	105,0	11,0	LI	NBR	TB
02612BRGF	BRG	122,2	140,8	11,8	AH	FPM	TB
02614GRE	GRE	8,0	16,0	2,5	LI	NBR	A
02616GRE	GRE	10,0	19,0	3,4	LI	NBR	A
02618GRG	GRG	16,7	35,0	6,5/8,3	LI	NBR	A
02619BRAGF	BRAG	112,5	130,0	11,0	AH	FPM	A
02629BRAGF	BRAG	91,0	111,0	10,0	AH	FPM	A
02632GR	GR	35,0	42,0	4,0	LI	NBR	TB
02633GR	GR	40,0	50,0	4,0	LI	NBR	TB
02634GR	GR	45,0	55,0	4,0	LI	NBR	TB
02635GR	GR	55,0	65,0	5,0	LI	NBR	TB
02636GR	GR	60,0	72,0	6,0	LI	NBR	TB
02637GR	GR	70,0	85,0	7,0	LI	NBR	TB
02638GR	GR	12,0	18,0	3,0	LI	NBR	TB
02639GR	GR	15,0	23,0	3,0	LI	NBR	TB
02640GR	GR	17,0	25,0	3,0	LI	NBR	TB
02641GR	GR	20,0	28,0	4,0	LI	NBR	TB
02642GR	GR	25,0	32,0	4,0	LI	NBR	TB
02643GR	GR	30,0	37,0	4,0	LI	NBR	TB
02648BRAGP	BRAG	35,0	53,3	8,0	AH	ACM	TB
02649BRAGP	BRAG	35,0	52,0	8,0	H	ACM	TB
02654BR	BR	28,6	39,7	9,5	LI	NBR	TB

Número Sabó Número Sabó Sabo Number	Tipo Type	Diâmetro Eixo Diámetro Eje Shaft Diameter	Diâmetro Alojamento Diámetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material Lábio Material Labio Material	Grupo Grupo Group
02656BRAF	BRA	55,0	70,1	8,0	AH	FPM	A
02657BRAGS	BRAG	26,0	42,0	8,0	H	MVQ	A
02658BRGF	BRG	43,0	75,0	10,0	AH	FPM	TB
02660BRGF	BRG	54,0	77,7	11,0	H	FPM	TB
02661BRG	BRG	80,0	100,0	12,0	H	NBR	TB
02662BRG	BRG	80,0	100,0	12,0	AH	NBR	TB
02663NF	N	9,9	14,3	13,1/14,5	LI	FPM	E
02664BAGP	BAG	80,0	100,0	10,0	BI	ACM	TB
02667BRGP	BRG	57,2	77,8	10,0	BI	ACM	TB
02669GA	GA	17,0	25,0	4,0	LI	NBR	TB
02671BRGF	BRG	75,0	100,0	10,0	BI	FPM	TB
02672BRG	BRG	30,0	72,0	6,5	BI	NBR	A
02673BRX	BRX	57,0	85,0	13,0	LI	NBR	F
02674NF	N	10,2	14,3	13,1/14,5	LI	FPM	E
02675BRG	BRG	40,0	82,9	10,0	BI	NBR	TB
02677BRG	BRG	70,0	85,0	8,0	LI	NBR	TB
02678BRGS	BRG	30,0	47,0	7,0	H	MVQ	TB
02679BRG	BRG	145,0	175,0	14,0	LI	NBR	TB
02681BARGF	BARG (105)	29,9	42,0	7,0	H	NBR	A
02682BRAGF	BRAG	42,0	55,0	10,0	AH	FPM	A
02683GAG	GAG	15,0	35,0	8,0	LI	NBR	A
02685BR	BR	60,0	90,0	8,0	LI	NBR	TB
02686BRGE	BRGE (67)	63,5	98,5	17,9	H	ACM	A
02687BRGE	BRGE (67)	76,3	125,4	16,5	BI	NBR/ACM	A
02689BAG	BAG	12,0	20,0	5,0	LI	NBR	TB
02690BRG	BRG	95,0	115,0	13,0	BI	NBR	TB
02691GA	GA	27,0	34,0	3,0	LI	NBR	TB
02693BRGE	BRGE (12)	54,0	80,0	11,1/16,6	BI	NBR	A
02695BRGG	BRGG	70,0	90,0	14,0	LI	NBR	A
02696BRAGF	BRAG	105,0	130,0	12,0	H	FPM	A
02697BRAGF	BRAG	120,0	140,0	13,0	AH	FPM	TB
02698GR	GR	18,0	24,0	4,0	LI	NBR	TB
02699BRG	BRG	32,0	52,0	7,0	LI	NBR	TB
02700GRG	GRG	20,0	27,0	5,0	LI	NBR	A
02701BRG	BRG	17,0	28,0	5,0	LI	NBR	TB
02702BRAGF	BRAG	80,0	98,0	10,0	AH	FPM	TB
02703GAE	GAE (242)	27,0	33,0	4,0	LI	NBR	C
02704GAE	GAE (209)	30,7	36,7	7,0	LI	NBR	A
02705GAE	GAE (209)	26,7	32,7	4,0	LI	NBR	A
02706GAE	GAE (209)	56,0	63,2	11,0	LI	NBR	A
02707GAE	GAE (209)	37,0	45,0	12,0	LI	NBR	A
02710GRGE	GRGE (226)	20,0	37,0	0,7	LI	NBR	A

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02711GRGE	GRGE	35,0	48,2	5/14,4	LI	NBR	A
02712BRGP	BRG	25,0	40,0	8,0	H	ACM	TB
02713BRY	BRY	121,1	160,2	35,0	BI	NBR	I
02715GA	GA	22,2	28,6	3,2	LI	NBR	TB
02716BAEF	BAE (79)	19,0	50,8	1,7/7,7	LI	FPM	L
02720BRGP	BRG	45,0	62,0	9,0	H	ACM	TB
02721BRGP	BRG	48,0	66,0	11,0	AH	ACM	TB
02722BR	BR	19,0	36,6	8,5	LI	NBR	TB
02723BAF	BA	48,0	75,0	8,0	H	FPM	TB
02724BRGP	BRG (122)	49,1	67,3	7,5	LI	ACM	A
02727BRG	BRG	25,0	52,0	8,0	LI	NBR	TB
02728BRGE	BRGE (04)	28,0	52,0	6,0/9,0	AH	NBR	A
02729BA	BA	21,9	32,0	6,0	LI	NBR	TB
02730BRG	BRG	17,0	30,0	7,0	LI	NBR	TB
02731BAGF	BAG	28,6	41,2	7,0	LI	FPM	TB
02732BRG	BRG	35,0	82,9	10,0	BI	NBR	TB
02734NE	NE	8,6	17,0	13/15,2	LI	NBR	J
02735GB	GB	63,0	110,0	13,0	LI	NBR	A
02736GA	GA	45,0	51,9	4,0	LI	NBR	TB
02737GB	GB	41,0	73,0	13,0	LI	NBR	A
02740BRGP	BRG	21,8	35,0	7,0	H	ACM	TB
02741BRGGP	BRGG	40,0	60,0	10,0/11,5	BI	ACM	A
02744GY	GY	30,0	52,0	10,0	LI	NBR	I
02745BRG	BRG	45,0	60,0	7,0	LI	NBR	TB
02751BRG	BRG	90,0	120,0	12,0	BI	NBR	TB
02753BRG	BRG	75,0	95,0	13,0	LI	NBR	TB
02759BAG	BAG	72,5	92,2	9,0	AH	NBR	TB
02762BR	BR	8,0	15,0	5,5	LI	NBR	TB
02763BAE	BAE (107)	22,0	31,8	6,0	LI	NBR	A
02770BB	BB (10)	125,0	150,0	12,0	LI	NBR	A
02771BB	BB (10)	150,0	180,0	15,0	LI	NBR	A
02777BRAS	BRA	51,0	65,0	7,0	H	MVQ	A
02778B	B	145,0	175,0	13,0	BI	NBR	TB
02780BRF	BR	76,0	89,7	5,5	AH	FPM	TB
02784BAGF	BAG	44,4	63,5	12,7	BI	FPM	TB
02786BREF	BRE (107)	12,0	16,2	10/14,2	LI	FPM	E
02788GA	GA	30,0	37,0	3,0	LI	NBR	TB
02792BAG	BAG	12,0	28,1	8,0	LI	NBR	TB
02793BRGF	BRG	42,0	58,0	7,0	H	FPM	TB
02794BRAGF	BRAG	38,0	50,0	8,0	H	FPM	A
02797BRGEF	BRGE (57)	25,0	38,0	10,5/14,5	LI	FPM	A
02801BAF	BA	85,0	105,0	10,0	AH	FPM	TB

Número Sabo Número Sabo Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material labio Material Labio Material	Grupo Grupo Group
02802BRGEF	BRGE	25,0	35,0	7,0	LI	FPM	A
02804BAGE	BAGE (42)	88,9	152,4	30,4	LI	NBR	A
02805BAGE	BAGE (42)	82,6	134,6	41,2	LI	NBR	A
02813BRG	BRG	30,0	52,0	8,0	LI	NBR	TB
02814GRG	GRG (09)	22,2	28,0	8,0	LI	NBR	A
02815GAE	GAE (209)	29,0	35,0	6,0	LI	NBR	A
02817BRAGF	BRAG	30,0	50,0	7,0	H	FPM	TB
02818BRAGF	BRAG	50,0	65,0	9,0	H	FPM	A
02819GAE	GAE (62)	50,8	58,8	3,6/4,6	LI	NBR	A
02821BRG	BRG	20,0	35,0	6,0	LI	NBR	TB
02822BRG	BRG	40,0	52,0	6,0	LI	NBR	TB
02828BR	BR	28,5	38,0	6,0	LI	NBR	TB
02830BRG	BRG	18,2	30,0	6,0	LI	NBR	TB
02831BAGP	BAG	30,0	52,2	7,0	H	ACM	TB
02833BAGG	BAGG	48,0	65,5	7,0	LI	NBR	A
02836BAGEF	BAGE (61)	35,0	54,9	9/14,7	BI	FPM	A
02837BAGF	BAG	23,0	35,0	8,0	H	FPM	TB
02842BRGF	BRG	32,0	47,0	10,0	H	FPM	TB
02843BRGF	BRG	32,0	47,0	10,0	AH	FPM	TB
02844BRAGF	BRAG	40,0	56,0	7,0	H	FPM	A
02845BRAGF	BRAG	70,0	85,0	8,0	AH	FPM	A
02847GA	GA	55,0	62,9	5,0	LI	NBR	TB
02853BAGEF	BAGE (238)	63,5	102,5	7,0	H	FPM	A
02856GAE	GAE (50)	26,0	40,0	5,0	LI	NBR	A
02859BRGH	BRGH (203)	40,0	55,0	8,8	LI	NBR/FPM NY	A
02862BRAGF	BRAG	44,7	61,2	8,8	H	FPM	A
02868BRG	BRG	125,0	150,0	13,0	BI	NBR	TB
02871BRAGF	BRAG	78,0	100,1	12,0	H	FPM	A
02872BRAGF	BRAG	130,0	160,0	12,0	AH	FPM	A
02873BRG	BRG	6,0	16,0	6,5	LI	NBR	TB
02874BAY	BAY	59,9	85,4	16,2	BI	NBR	I
02875GRG	GRG	16,0	23,0	3,3	LI	NBR	A
02876GRG	GRG	16,5	25,0	5,0	LI	NBR	A
02877BAG	BAG	28,6	41,3	6,5	H	NBR	TB
02878BAG	BAG	22,2	31,8	6,0	AH	NBR	TB
02879BAG	BAG	41,3	54,0	6,5	BI	NBR	TB
02880BG	BG	44,5	73,0	12,7	LI	NBR	A
02882NE	NE (233)	8,7	15,9	16,2	LI	MVQ	E
02888NE	NE (233)	9,7	13,6	12,4/14,6	LI	MVQ	E
02893BRAGP	BRAG	40,0	56,0	7,0	H	ACM	A
02894BY	BY	106,5	140,0	15,0	BI	NBR	I
02900BRAGF	BRAG	90,0	104,0	11,0	AH	FPM	A

Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.

Before specifying the use of a retainer, please check for availability • 0800 7712155

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02903GRO	GRO (247)	35,0	48,5	5,0/7,0	LI	NBR	A
02904GAE	GAE (242)	12,0	27,0	4,0	LI	NBR	C
02905BRGG	BRGG (202)	45,0	65,0	6,0/7,0	LI	NBR	A
02910BAGE	BAGE (172)	44,2	71,4	10,0/16,5	H	NBR	A
02911BRAGP	BRAG	40,0	55,0	8,0	AH	ACM	A
02919BREF	BRE (108)	7,0	10,9	6,2/9,5	LI	FPM	E
02925BRAGF	BRAG	85,0	105,0	12,0	AH	FPM	A
02926BREF	BRE (107)	8,7	12,7	12,12/11	LI	FPM	E
02927BREF	BRE (107)	8,7	13,5	7,6/11	LI	FPM	E
02928BRE	BRE (39)	16,0	22,0	6,2/9,7	LI	NBR	A
02929BRGE	BRGE (40)	30,0	62,9	2,5/20,2	LI	NBR	A
02930BRGP	BRG	30,0	47,0	10,0	BI	ACM	TB
02932BAGF	BAG	150,0	180,0	15,0	BI	FPM	TB
02933BRG	BRG	150,0	180,0	15,0	LI	NBR	TB
02936BRAGP	BRAG	30,0	52,0	7,0	H	ACM	A
02938BRAG	BRAG	95,0	115,0	13,0	BI	NBR	TB
02941BRAG	BRAG	125,0	150,0	15,0	BI	NBR	TB
02941BRAGF	BRAG	125,0	150,0	15,0	BI	FPM	TB
02946BRAGP	BRAG	70,0	85,0	8,0	AH	ACM	A
02950BRGF	BRG	32,0	47,0	10,0	BI	FPM	TB
02952BAGEP	TA (figura)	21,8	85,0	48,4	H	ACM	Q
02955BRF	BR	60,0	80,0	10,0	AH	FPM	TB
02960BAGEP	BAGE (60)	47,6	68,0	10,4	H	ACM	A
02961BAGGP	BAGG (177)	70,0	90,0	12,7	AH	ACM	A
02962BRGF	BRG	35,0	47,0	7,0	BI	FPM	TB
02963BROF	BRO	17,0	30,0	7,0	LI	FPM	A
02964GAG	GAG (119)	7,9	12,7	11,0	LI	NBR	A
02965BRGG	BRGG (202)	47,0	60,0	7,0	LI	NBR	A
02966BRGG	BRGG (202)	30,0	47,0	8,0	LI	NBR	A
02967BRGE	BRGE (195)	23,0	37,0	7,0/11,0	LI	NBR	A
02968GAE	GAE (209)	12,0	39,5	8,6	LI	NBR	A
02969BREF	BRE (107)	8,0	12,7	7,6/11	LI	FPM	E
02970BREF	BRE (107)	9,5	14,3	13,68/11	LI	FPM	E
02971BREF	BRE (108)	8,1	12,0	7,6/11	LI	FPM	E
02972BAG	BAG	40,0	55,0	8,0	BI	NBR	TB
02973BRAGF	BRAG	110,0	130,0	13,0	AH	FPM	A
02979BA	BA	43,0	52,0	6,5	LI	NBR	TB
02981GA	GA	43,0	52,0	6,5	LI	NBR	TB
02983BRO	BRO	140,0	165,0	13,0	BI	NBR	A
02984BRG	BRG	32,0	45,0	7,0	LI	NBR	TB
02985BRF	BR	105,0	130,0	12,0	AH	FPM	TB
02987GR	GR	32,0	45,0	6,5	LI	NBR	TB

Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diâmetro Eixo Diâmetro Eje Shaft Diameter	Diâmetro Alojamento Diâmetro Alojamiento Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material lábio Material Lábio Material	Grupo Grupo Group	
02990BAGP	BAG	47,6	63,6	9,7	H	ACM	TB	
02991BAGGP	BAGG (177)	63,5	82,5	12,7	AH	ACM	A	
02996BRGE	BRGE (13)	58,0	80,0	4,5/10,5	H	ACM	A	
02997BRGE	BRGE	90,0	115,0	4,1/13	AH	ACM	A	
03001GAE	GAE (209)	22,2	29,0	6,0	LI	NBR	A	
03002GAE	GAE (209)	52,0	59,0	7,0	LI	NBR	A	
03003GRE	GRE	20,0	30,0	4,0	LI	NBR	A	
03004BRG	BRG	20,0	38,0	6,0	AH	NBR	TB	
03005BR	BR	10,0	21,0	5,0	AH	NBR	TB	
03006GAE	GAE (209)	31,0	38,0	6,0	LI	NBR	A	
03009BREF	BRE (228)	23,3	29,7	1,8/4,3	LI	FPM	C	
03010GR	GR (223)	19,0	35,0	2,2	LI	NBR	A	
03012BA	BA	17,0	28,0	7,0	LI	NBR	TB	
03013BA	BA	20,0	31,0	7,0	LI	NBR	TB	
03017BAGF	BAG	80,0	100,0	10,0	BI	FPM	TB	
03019BRAGEP	BRAGE (185)	22,0	40,0	8,0	H	ACM	A	
03025BRGF	BRG	25,0	35,0	6,0	H	FPM	TB	
03026GAE	GAE (65)	30,0	62,0	0,9/5	LI	NBR	A	
03029NEH	NEH	22,2	28,6	6,5		NBR/PTFE	B	
03033S	S	21,9	52,8	2,0/21,6	LI	CR	R	
03035GE	GE (140)	19,7	31,8	18,0	LI	NBR	J	
03036U	U	157,0	170,3	19,5	LI	NBR	B	
03038MGE1	MGE	2,0	25,0	14,7	LI	NBR	G	
03039MGE	MGE			24,5	14,7	LI	NBR	G
03042NE	NE	4,0	12,0	8,0	LI	NBR	J	
03044BREF	BRE (101)	7,0	9,8	9,6/10	LI	FPM	E	
03045BREF	BRE (111)	9,5	14,4	9,1/13,2	LI	FPM	E	
03046GE	GE (140)	22,9	34,8	26,7	LI	NBR	J	
03050NEF	NE (74)	17,0	21,5	15,0	LI	FPM	J	
03052U	U (A)	12,0	22,0	7,6	LI	NBR	B	
03053U	U (C)	30,0	39,0	4,8	LI	NBR	B	
03056U	U (B)	54,0	70,0	12,0	LI	NBR	B	
03060GGE	GGE (246)	22,0	42,5	29,5	LI	NBR	A	
03063U	U (B)	62,0	70,0	9,0	LI	NBR	B	
03067U	U (B)	36,0	52,0	12,0	LI	NBR	B	
03071U	U (B)	41,0	57,0	9,5	LI	NBR	B	
03072U	U (B)	16,0	27,0	7,5	LI	NBR	B	
03077G	G	13,2	29,3	3,0	LI	NBR	J	
03078G	G	7,2	19,3	3,0	LI	NBR	J	
03101U	U (B)	44,0	60,0	12,0	LI	NBR	B	
03102U	U (B)	25,0	32,0	9,0	LI	NBR	B	
03103U	U (B)	28,0	38,0	8,0	LI	NBR	B	

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03110BRGE	BRGE (193)	12,0	28,1	8,0	LI	NBR	A	03322BRO	BRO	18,0	32,0	4,5	LI	***	A
03113BRGH	BRGH (203)	14,0	26,9	8,9	LI	HNBR	A	03331BRAG	BRAG	19,0	33,3	7,9	H	HNBR	TB
03126BRG	BRG	20,0	40,0	6,4	LI	NBR	TB	03332BRGG	BRGG (202)	25,0	47,0	8,0	BI	NBR	A
03129GR	GR	31,8	45,0	3,6	LI	NBR	TB	03346BRF	BR	52,0	68,0	8,0	BI	FPM	TB
03135GE	GE (52)	29,8	42,3	29,5	LI	NBR	A	03347GRGGO	GRGGO	22,0	35,0	35,2/8	LI	NBR	C
03150U	U (sem figura)	15,0	21,5	3,2	LI	NBR	B	03365GRE	GRE (143)	19,0	25,4	12,7	LI	NBR	A
03156U	U (sem figura)	14,0	23,2	3,2		NBR	B	03366BRO	BRO	30,0	40,0	10,0	LI	NBR	A
03161BA	BA	41,1	50,8	5,9	LI	NBR	TB	03369GRGE	GRGE (120)	20,0	37,0	8,0	LI	NBR	A
03164GRG	GRG	42,0	58,0	7,0	LI	NBR	TB	03370GRGE	GRGE (120)	18,0	28,0	8,0	LI	NBR	A
03182BROF	BRO	17,0	35,0	7,0	LI	FPM	A	03373GRE	GRE	16,0	24,0	4,0	LI	NBR	A
03186NEH	NEH	31,8	38,1	6,2	LI	FPM	B	03374GAE	GAE (209)	24,0	0,0	8,5	LI	NBR	A
03202GAE	GAE (87)	11,8	28,0	5,0/7,5	LI	HNBR	A	03377BRE	BRE (39)	16,0	22,0	9,7	LI	NBR	A
03207NEH	NEH	20,0	29,0	6,0	LI	NBR	B	03388BAEF	BAE (79)	15,9	29,0	7,1	LI	FPM	L
03214NE	ME (F)	46,0	51,7	20,0	LI	ESTAMP	O	03389BRG	BRG	13,8	24,0	5,0	LI	NBR	TB
03224BROF	BRO	18,0	30,0	7,0	LI	FPM	A	03390BRO	BRO	33,0	46,0	11,0	LI	NBR	A
03226BRG	BRG	17,0	47,2	7,0	LI	NBR	TB	03391BRO	BRO	41,0	54,0	11,0	LI	NBR	A
03232NE	NE (142)	31,4	49,5	16,8	LI	NBR	J	03392BRO	BRO	37,0	50,0	11,0	LI	NBR	A
03245BRH	BRH	31,8	44,7	6,4	LI	NBR	A	03393GR	GR	57,2	76,1	6,3	LI	NBR	TB
03248BRO	BRO	35,0	48,0	11,0	LI	NBR	A	03401BAG	BAG	12,0	22,0	5,0	LI	NBR	TB
03249BRO	BRO	31,0	43,0	11,0	LI	NBR	A	03402BAG	BAG	17,0	39,9	5,0	LI	NBR	TB
03250BRG	BRG	12,5	25,0	8,0	LI	NBR	TB	03403BAG	BAG	15,0	29,6	4,0	LI	NBR	TB
03251BRG	BRG	34,0	63,0	12,0	LI	NBR	TB	05003BRAGS	BRAG	35,0	48,0	7,0	H	MVQ	TB
03252BRG	BRG	14,0	22,0	5,0	BI	NBR	TB	05005BRAGS	BRAG	35,0	48,0	7,0	H	MVQ	TB
03253BRG	BRG	17,0	27,0	5,0	LI	NBR	TB	05025BRGS	BRG	72,2	95,3	9,7		MVQ	TB
03254BR	BR	5,0	14,5	4,5	LI	NBR	TB	05030BR	BR	28,0	52,1	10,0	LI	NBR	TB
03255BR	BR	12,0	21,0	4,0	LI	NBR	TB	05049BRGEF	BRGG	15,9	30,0	6,0	H	FPM	A
03260BRGGE	BRGGE (138)	30,0	63,2	17,0	LI	NBR	A	05050BRG	BRG	25,0	35,0	7,0	H	NBR	TB
03267GA	GA	10,0	15,0	3,0	LI	NBR	TB	05052GAGE	GAGE (215)	28,2	45,9	0,8/5,5	LI	NBR	A
03269BRG	BRG	18,0	32,0	4,5	***	NBR	TB	05053MR	MR ( A )		27,0	7,0	LI	NBR	G
03270BRE	BRE (sem figura)	24,0	37,0	20,0	***	***	A	05055BRAGF	BRAG	64,0	80,0	9,0	H	FPM	TB
03271BR	BR	24,0	36,0	7,0	***	***	TB	05056G	G (253)	8,7		0,9/1,6		NBR	H
03272BAGS	BAG	36,0	54,0	6,5	***	***	TB	05060G	G (253)	17,5		1,6		NBR	H
03273GRO	GRO (sem figura)	36,0	54,0	8,0	***	***	A	05062BRAG	BRAG	64,0	80,0	8,0	AH	FPM	TB
03274BR	BR	8,4	16,0	6,5	***	***	TB	05067MR	MR ( A )		28,0	7,0		NBR	G
03275GAO	GAO (244)	48,7	58,0	8,5	***	***	A	05073BRAGF	BRAG	30,0	52,0	7,0	H	FPM	TB
03281GR	GR (249)	17,0	40,0	4,6	LI	NBR	C	05074BRAGF	BRAG	30,0	43,0	8,0	H	FPM	TB
03282GAO	GAO (244)	60,0	70,0	9,1	LI	***	A	05075BRAGF	BRAG	74,0	90,0	10,0	AH	FPM	TB
03285BRGGE	BRGGE (125)	32,0	52,6	15,5	LI	NBR	A	05078U	U (sem figura)	8,0	14,0	4,0	LI	FPM	B
03286BRAGP	BRAG	35,0	46,5	7,0	LI	ACM	TB	05080G	G (253)	8,3		1,5/1,9		NBR	H
03301MRP	MR (C)		28,0	7,0		ACM	G	05081MR	MR ( A )		27,5	7,0		NBR	G
03317BAGP	BAG	52,0	70,0	8,0	BI	ACM	TB	05082MR	MR ( A )		28,0	7,0		NBR	G
03321BRG	BRG	55,0	75,0	8,0	LI	***	TB	05085NE	NE		69,8	3,0	LI	NBR	J

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05086G	G	4,0	10,5	3,2	LI	NBR	J	05302BRS	BR	80,0	100,0	13,0	***	***	TB
05087G	G	17,5	25,0	4,8	LI	NBR	J	05303BRGS	BRG	45,0	60,0	10,0	***	***	TB
05091BRGF	BRG	94,9	115,0	10,0	AH	FPM	TB	05304BRAGF	BRAG	85,7	114,3	13,0	H	FPM	TB
05093BRAGF	BRAG	30,0	42,0	7,0	H	FPM	TB	05305BRGF	BRG	58,0	74,0	10,0	AH	FPM	TB
05102BRAGP	BRAG	32,0	47,0	10,0	H	ACM	TB	05306BRGS	BRG	50,0	68,0	10,0	***	***	TB
05103BRAGP	BRAG	35,0	50,0	8,0	H	ACM	TB	05307BRGP	BRG	34,0	48,0	7,0	H	ACM	TB
05107BR	BR	44,5	63,5	9,5	H	NBR	TB	05308BRGP	BRG	50,8	69,9	11,0	H	ACM	TB
05108BRS	BR	76,2	95,3	9,5	AH	MVQ	TB	05309BRGP	BRG	53,0	69,9	11,0	H	ACM	TB
05117BRG	BRG	30,0	42,0	6,0	BI	NBR	TB	05313BRGS	BRG	35,0	50,0	10,0	***	***	TB
05125BRGS	BRG	76,2	95,2	9,7	AH	MVQ	TB	05338PHSI	PHSI	79,0	-	21,0	AH	PTFE	Q
05126BRGF	BRG	60,0	76,2	11,1	AH	FPM	TB	05343BRAGF	BRAG	90,0	104,0	11,0	AH	FPM	TB
05139GAGE	GAGE	28,0	46,0	3,0	LI	NBR	A	05352BRGF	BRG	57,0	71,0	9,0	H	FPM	TB
05141BRAGP	BRAG	17,0	28,0	7,0	LI	NBR	TB	05353BRGF	BRG	46,7	62,0	9,0	H	FPM	TB
05142BRAGP	BRAG	20,0	31,0	7,0	LI	NBR	TB	05363BRG	BR	370	470	10,2	H	FPM	TB
05148BRF	BR	12,4	19,0	5,0	BI	FPM	TB	05402GHSI	GHSI	85,0	105,0	15,7	AH	PTFE	Q
05150BRAGF	BRAG	112,5	130,0	11,0	AH	FPM	TB	05411BA	BA	42,0	58,0	7,0	LI	NBR	TB
05155GRAHF	GRAHF	115,0	140,0	13,0	AH	ACM	P	05413GRGG	GRGG	57,5	74,0	8,5	LI	NBR	A
05159BRAGF	BRAG	32,0	42,0	7,8/8,0	H	FPM	TB	05414BRAGF	BRAG	155,0	180,0	15,0	AH	FPM	TB
05166BRAGF	BRAG	79,0	95,3	11,0	AH	FPM	TB	05420BRGF	BRG	90,0	110,0	9,0	AH	FPM	TB
05167BRAGEF	BRAGE (137)	36,6	52,4	8,0	H	FPM	A	05421BRGF	BRG	101,6	125,0	13,0	AH	FPM	TB
05182BRAGF	BRAG	55,0	68,0	8,0	H	FPM	TB	05502GHSI	GHSI	85,0	-	13,0	AH	PTFE	Q
05183GAGE	GAGE	28,0	38,0	3,0	LI	NBR	A	05507BRS	BR	30,0	42,0	8,0	***	MVQ	TB
05184GRAHF	GRAHF	100,0	130,0	12,0	H	ACM	P	05508BRS	BR	35,0	470	7,0	H	MVQ	TB
05187BRGF	BRG	40,0	56,0	7,0	H	FPM	TB	05509BRGS	BRG	90,0	110,0	13,0	H	MVQ	TB
05190U	U (A)	14,0	21,0	4,2	LI	FPM	B	05510BRGF	BRG	42,0	62,0	7,0	H	FPM	TB
05196BRAGP	BRAG	30,0	52,0	7,0	H	ACM	TB	05511BRGF	BRG	35,0	50,0	8,0	BI	FPM	TB
05199GRGH	GRGH	40,0	62,0	7,4	H	PTFE	P	05512BRGF	BRG	90,0	110,0	7,0	AH	FPM	TB
05202BRAGP	BRAG	30,0	47,0	7,0	H	ACM	TB	05513KIT	KIT					S	
05210GHSI	GHSI	85,0	-	13,0	AH	PTFE	Q	05514GE	GE	27,0	35,0	2,5	LI	NBR	A
05214GRAHF	GRAHF	78,0	104,0	11,0	H	ACM	P	05515BRS	BR	30,0	40,0	7,0	LI	MVQ	TB
05228GHSI	GHSI (116)	103,0	128,0	14,0	AH	PTFE	Q	05516BRGS	BRG	25,0	42,0	8,0	H	MVQ	TB
05229GRAGGH	GRAGGH	59,3	76,2	8,3	H	PTFE	P	05517BRGS	BRG	22,0	45,0	8,0	AH	MVQ	TB
05230GRAGH	GRAGGH	110,0	130,0	13,0	AH	PTFE	P	05518KIT	KIT					S	
05239GHSIF	GHSIF	99,5	108,0	19,0	AH	PTFE	Q	05529BRGP	BRG	32,0	48,0	8,0	H	ACM	TB
05245MJEF	MJE	74,0			AH	FPM	Q	05530BRGP	BRG	30,0	44,0	7,0	H	ACM	TB
05246BRAGF	BRAG	40,0	55,0	7,0	H	FPM	TB	05531BRGS	BRG	30,0	40,0	7,0	H	MVQ	TB
05250BRGF	BRG	42,0	53,0	7,0	H	FPM	TB	05535GRAGH	GRAGGH	63,5	79,5	8,0	H	PTFE	P
05253BRGF	BRG	35,0	50,0	7,0	H	FPM	TB	05536GRAGH	GRAGGH	75,0	93,0	8,0	H	PTFE	P
05254BRGF	BRG	88,0	108,0	10,1	AH	FPM	TB	05545MEH	MEH	53,7	67,7	7,0	LI	MEH	P
05266BRAGF	BRAG	27,0	37,0	7,0	H	FPM	TB	05548BRGF	BRG	11,9	24,0	6,0	H	FPM	TB
05269BRAGF	BRAG	27,0	42,0	8,1	H	FPM	TB	05578BRGF	BRG	130,0	160,0	14,0	AH	FPM	TB
05287GRAGH	GRAGH (148)	130,0	150,0	12,0	AH	PTFE	P	05580BRGF	BRG	32,0	44,0	6,0	H	FPM	TB

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05581GRGH	GRGH (147)	40,0	62,0	7,4	H	PTFE	P
05586BRGP	BRG	18,9	30,0	5,3	AH	ACM	TB
05587BRGF	BRG	98,0	120,0	7,0	AH	FPM	TB
05588BRGF	BRG	64,0	88,0	6,0	H	FPM	TB
05589BRGF	BRG	47,5	62,0	7,0	AH	FPM	TB
05590BRGF	BRG	85,0	105,0	9,0	AH	FPM	TB
05591BRGF	BRG	42,0	66,0	6,0	H	FPM	TB
05592BRGF	BRG	27,0	47,0	7,0	H	FPM	TB
05593BRAGF	BRAG	55,0	70,0	8,0	H	FPM	TB
05599BRGF	BRG	70,0	86,0	7,0	AH	FPM	TB
05600BRGF	BRG	42,0	54,0	6,0	H	FPM	TB
05601BRGF	BRG	80,0	100,0	8,0	AH	FPM	TB
05603KIT	KIT	63,5	79,5	8,0	H	PTFE	S
05604KIT	KIT	75,0	93,0	8,0	H	PTFE	S
05656BREF	BRE (231)	30,0	45,0	8,0	AH	FPM	A
05658BRS	BR	35,0	47,0	7,0	H	MVQ	TB
05659BRGS	BRG	50,0	68,0	10,0	H	MVQ	TB
05660BRP	BR	17,0	31,5	7,0	LI	ACM	TB
05663BRGP	BRG	22,0	35,0	7,0	H	ACM	TB
05675BRGF	BRG	80,0	100,0	10,0	H	FPM	TB
05679GRAGH	GRAGH (148)	120,0	140,0	13,0	H	ACM	P
05680GRAHF	GRAHF	145,0	175,0	13,0	AH	ACM	P
05681BAGF	BAG	40,0	49,5	6,5	H	FPM	TB
05682BAF	BA	28,0	41,0	9,5	H	FPM	TB
05683BRG	BRG	50,0	70,0	10,0	H	NBR	TB
05684BAG	BAG	114,0	135,0	13,0	H	NBR	TB
05699IOSS	IOSS	85,0			AH		Q
05701BRG	BRG	19,0	30,0	6,2	LI	NBR	TB
05702KIT	KIT	40,0	62,0	7,4	H	PTFE	S
05711BRGP	BRG	17,0	32,2	6,0	H	ACM	TB
05712BRAGP	BRAG	40,0	52,0	6,0	H	ACM	TB
05713BAGP	BAG	85,0	100,0	8,6	AH	ACM	TB
05725BRAGF	BRAG	180,0	205,0	15,0	AH	FPM	TB
05728KIT	KIT	130,0	150,0	22,0	AH	PTFE	S
05735GRAH	GRAH	48,0	59,0	9,5	H	PTFE	P
07002GRG	GRG (225)	15,0	24,0	6,0	LI	HNBR	A
07012BRGP	BRG	45,0	60,0	8,0	BI	ACM	TB
07021BRGP	BRG	40,0	55,0	8,0	H	ACM	TB
07022BRGP	BRG	30,0	43,6	7,0	H	ACM	TB
07023GA	GA	53,0	82,0	7,5	LI	NBR	TB
07062BAGP	BAG	41,2	63,5	8,0	H	ACM	TB
07063BRAG	BRAG	15,0	21,0	5/6,5	LI	NBR	A

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07065BR	BR	55,0	72,0	10,0	LI	NBR	TB
07066S	S (149)	30,0	108,0	20,7	LI	NBR	R
07074NE	NE (141)	50,0	76,0	6,0	LI	NBR	J
07075GRE	GRE (152)	48,0	77,0	7,7	LI	NBR	A
07076GA	GA	52,0	68,0	6,0	LI	NBR	TB
07077GRE	GRE (106)	45,1	65,0	8,2	LI	NBR	A
07078BR	BR	7,7	14,7	5,0	LI	HNBR	TB
07095BRGE	BRGE (67)	57,2	82,6	14,0	AH	ACM	A
07098BR	BR	82,5	107,9	16,0	LI	NBR	TB
07099GRE	GRE (151)	82,5	107,9	16,0	LI	NBR	A
07106ME	ME (C)	46,0	51,7	20,0		ESTAMP	O
07118U	U (A)	16,0	22,0	6,0	LI	NBR	B
07121BR	BR	99,9	130,0	12,0	LI	NBR	TB
07133ME	ME (C)	57,3	90,1	7,5		ESTAMP	O
07134BGE	BGE	21,0	32,0	7,0	H	NBR	A
07137BGE	BGE	22,8	40,0	6,5/8	H	ACM	A
07138BAGEP	BAGE (172)	29,8	52,0	10,0/13,5	AH	ACM	A
07139BAGEP	BAGE (172)	29,8	50,0	10,0/13,5	H	ACM	A
07140GE	GE (127)	28,6	57,0	13,0	LI	NBR	A
07148BRAGEP	TA (figura)	28,0	40,0	54,5	H	ACM	Q
07181BR	BR	57,1	76,1	12,7	AH	NBR	TB
07198MR	MR (C)			20,0	4,0		G
07199BAGEP	BAGE (176)	38,1	60,3	12,7/15,9	AH	ACM	A
07216GAEX	GAEX	69,5	105,0	11,0	LI	ACM	A
07217BY	BY (sem figura)	40,0	69,0	15,4	BI	NBR	I
07220BRG	BRG	89,0	114,0	13,0		NBR	TB
07224BRAGGP	BRAGG	40,0	52,0	9,0	BI	ACM	A
07240BAGEP	TA (figura)	21,8	35/54,9	31,0	H	ACM	Q
07250TA	TA (figura)	21,8	35/54,9	31,0	LI	ACM	Q
07258MRP	MR (A)			68,0	8,5		G
07262BAGGP	BAGG (145)	57,2	82,5	12,0	AH	ACM	A
07266S	S (255)	17,5	50,0	21,5	LI	NBR	R
07267BAGP	BAG	57,2	82,5	12,0	AH	ACM	TB
07281BAGE	BAGE (168)	145,0	170,0	15,0	LI	NBR	A
07284BRAGP	BRAG	40,0	55,0	8,0	BI	ACM	TB
07286BRP	BR	21,5	40,0	7,0	H	ACM	TB
07290BRAGF	BRAG	75,0	95,0	10,0	BI	FPM	TB
07291BRAGF	BRAG	95,0	115,0	13,0	BI	FPM	TB
07298MR	MR (C)			52,0	6,5		G
07299BA	BA	30,0	58,1	11,0	AH	NBR	TB
07300BY	BY	39,9	68,9	15,4	BI	NBR	I
07303BA	BA	38,1	47,6	7,0	H	NBR	TB

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07309BRAGP	BRAG	22,8	40,0	8,0	H	ACM	TB	07460MRP	MR (C)	0,0	40,0	0,0	***	ACM	G
07312BR	BR	117,4	142,9	12,5	LI	NBR	TB	07461BRF	BR	117,4	142,9	12,5	LI	FPM	TB
07313MR	MR (C)		20,0	4,0		NBR	G	07462BAEF	BAE (134)	145,0	170,0	11,3	LI	FPM	A
07319BRAGF	BRAG	120,0	145,0	15,0	BI	FPM	TB	07465BRAF	BRA	8,0	14,0	4,0	LI	FPM	TB
07322BRA	BRA	100,0	125,0	12,0	LI	NBR	TB	07475BRABGE	BRABGE (131)	85,0	145,0	37,0	BI	FPM/NBR	A
07323BRG	BRG	100,0	129,9	13,0	LI	NBR	TB	07481BRABGEF	BRABGE	40,0	70,0	0,5	BI	FPM	A
07328BRGP	BRG	18,0	30,0	6,4	LI	ACM	TB	07484BRAGF	BRAG	60,0	73,0	10,5	BI	FPM	TB
07338BAY	BAY	121,1	160,2	35,0	BI	NBR/FPM	I	07485BAF	BA	48,0	69,0	10,0	H	FPM	TB
07340BAYF	BAY	121,1	160,0	35,0	BI	FPM	I	07496BGE	BGE	21,0	32,0	9,0	H	NBR	A
07351BRGEF	BRGE (139)	21,5	48,0	8,4	H	ACM	A	07500BRAGEF	BRAGE (230)	42,0	72,0	10,0/16,0	H	FPM	A
07352BRAGP	BRAG	40,0	55,0	8,0	BI	ACM	TB	07502MR	MR (C)			52,0	8,0	NBR	G
07364BRAGP	BRAG	34,0	52,0	7,0	H	ACM	TB	07518BRG	BRG	15,0	26,0	7,0	LI	NBR	TB
07365BRAGF	BRAG	45,0	65,0	10,0	H	FPM	TB	07519BR	BR	16,0	22,8	4,8	LI	NBR	TB
07366BRGP	BRG	48,0	62,0	7,0	BI	ACM	TB	07538BRAGEP	BRAGE	29,8	52,0	10,0/13,5	AH	ACM	A
07371BRAGF	BRAG	125,0	150,0	15,0	BI	FPM	TB	07539BRAGEP	BRAGE	29,8	50,0	10,0/13,5	H	ACM	A
07372BRAG	BRAG	119,5	145,0	15,0	BI	NBR	TB	07540BRGP	BRG	21,8	35,0	7,0	H	ACM	TB
07373BRAGF	BRAG	65,0	90,0	15,0	H	FPM	TB	07551BR	BR	16,0	22,8	4,8	LI	NBR	TB
07375BY	BY	82,5	114,3	12,7	BI	NBR	I	07552BAGE	BAGE (60)	73,0	98,5	11,0	BI	NBR	A
07381BAG	BAG	41,0	65,4	13,0	BI	NBR	TB	07557BRGF	BRG	75,0	95,0	13,0	LI	FPM	TB
07387GAE	GAE (164)	40,0	66,0	7,0	LI	NBR	A	07590BRP	BR	7,9	16,0	6,0	LI	ACM	TB
07390GRAGX	GRAGX	12,0	18,0	8,0	LI	NBR	F	07591BRGHP	BRGH (203)	28,0	40,0	8,0	H	ACM	A
07394BRAG	BRAG	45,0	65,0	8,0	AH	ACM	TB	07592BAGEP	BAGE (06)	34,9	49,5	12,7	AH	ACM	A
07395BRAGGG	BRAGGG (133)	47,7	73,1	17,5	BI	NBR	A	07598BRAGF	BRAG	36,0	54,0	7,0	H	FPM	TB
07397BRAGP	BRAG	15,0	21,0	5,0	LI	ACM	TB	07599BAF	BA	46,0	68,0	12,0	H	FPM	TB
07398BAGEF	BAGE (61)	35,0	54,0	14,7	BI	FPM	A	07602BRAG	BRAG	52,0	72,0	12,0	BI	FPM	TB
07399BRP	BR	35,0	56,0	10,0	AH	ACM	TB	07603BRAF	BRA	68,0	85,0	10,0	H	FPM	TB
07401BRAGE	BRAGE	35,0	54,0	10,0	BI	ACM	A	07610BAF	BA	85,0	105,0	10,0	AH	FPM	TB
07406BRAGE	BRAGE (155)	38,0	60,2	18,5	AH	ACM	A	07611BA	BA	85,0	105,0	10,0	LI	NBR	TB
07408BRGP	BRG	11,6	24,0	10,0	LI	ACM	TB	07612BAF	BA	48,0	69,0	10,0	H	FPM	TB
07409BRP	BR	17,0	29,0	5,4	AH	ACM	TB	07613BRE	BRE	24,0	36,0	6,0	LI	NBR	F
07414BGE	BGE (184)	88,9	115,4	16,2/19,2	BI	NBR	A	07616BAGE	BAGE (126)	72,0	85,5	8,0	BI	NBR	A
07415BGE	BGE (184)	88,9	123,0	18,7/21,7	BI	NBR	A	07630BY	BY	40,0	69,0	15,4	BI	NBR	I
07416BY	BY	98,4	144,5	16,0	BI	NBR	I	07634BRXE	BRXE	40,0	69,0	15,4	BI	NBR	A
07425GAGGE	GAGGE	61,5	76,2	7,8	LI	NBR	A	07635GRA	GRA (153)	40,0	69,0	15,4	LI	NBR	A
07439BYF	BY	82,5	114,3	12,7	BI	FPM	I	07679S	S (255)	175	50,0	21,5	LI	NBR	R
07451BRP	BR	24,0	38,0	6,0	H	ACM	TB	07683GAG	GAG (243)	40,0	55,0	6,0	LI	NBR	A
07452BRAGP	BRAG	50,0	65,0	8,0	BI	ACM	TB	07684GR	GR	70,0	81,5	6,0	LI	NBR	TB
07453BRAGP	BRAG	60,0	75,0	8,0	BI	ACM	TB	07686GAE	GAE (117)	86,0	99,0	6,7	LI	NBR	A
07456GRG	GRG	18,0	27,0	8,5	***	NBR	TB	07687BAG	BAG	33,0	44,0	8,0	LI	NBR	TB
07457BRG	BRG	18,0	30,0	6,4	***	NBR	TB	07688BGE	BGE	62,0	85,0	8,5	LI	NBR	A
07458BRGP	BRG	21,9	40,0	8,0	***	ACM	TB	07689BRE	BRE (39)	35,0	41,0	6,0	LI	NBR	A
07459BRGGF	BRGG	50,0	65,0	10,0	***	FPM	A	07691BAF	BA	55,0	75,0	8,0	H	FPM	TB

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Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diámetro Eixo Diámetro Shaft Diameter	Diámetro Alojamento Diámetro Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Grupo Grupo Group	Número Sabó Número Sabó Sabo Number	Tipo Tipo Type	Diámetro Eixo Diámetro Shaft Diameter	Diámetro Alojamento Diámetro Bore Diameter	Altura Retentor Altura Retén Width	Orientação Orientación Direction of Rotation	Material lábio Material Labio Material	Grupo Grupo Group
07695BAG	BAG	35,0	55,0	8,0	BI	NBR	TB	08312BRF	BR	40,0	52,0	7,0	H	FPM	TB
07696BRGE	BRGE (124)	40,0	75,0	12,0	H	ACM	A	08313BRF	BR	48,0	65,0	10,0	H	FPM	TB
07698BAG	BAG	40,0	52,0	8,0	LI	NBR	TB	08314BGEF	BGE (135)	140,0	164,0	20,0	BI	FPM	A
07699BRG	BRG	48,0	70,0	9,0	BI	NBR	TB	08316BRY	BRY	75,0	100,0	10,0	LI	NBR	I
07700BAG	BAG	52,0	70,0	9,0	BI	NBR	TB	08317BAGF	BAG	168,0	188,0	31,5	BI	FPM	TB
07701BARG	BARG (105)	47,7	73,1	9,5	BI	NBR	A	08318GRE	GRE (128)	77,0	98,5	8,5	LI	NBR	A
07716BAGE	BAGE (237)	72,0	85,5	18,0	BI	NBR	A	08323BGY	BGY	158,0	188,0	14,5	BI	FPM/NBR	I
07717BRGP	BRG	40,0	55,0	10,0	H	ACM	TB	09203BREF	BRE (101)	6,0	8,8	12,2	LI	FPM	E
07718BRF	BR	11,0	17,0	4,0	LI	FPM	TB	09205BREF	BRE (101)	11,0	14,0	0,7	LI	FPM	E
07745BAGEP	BAGE (102)	38,1	54,1	12,7	AH	ACM	A	09208NE	NE (233)	8,6	13,5	11,4	LI	MVQ	E
07790BY	BY	142,0	170,0	14,0	BI	NBR	I	09210BREF	BRE (107)	8,8	14,3	11,0	LI	FPM	E
07786GGGX	GGGX	50,0	80,5	8,4	LI	NBR	F	09211BAEF	BAE	9,0	13,0	10,0	LI	FPM	E
07808BRAGF	BRAG	62,0	78,0	10,0	AH	FPM	A	09212BAEF	BAE	8,0	14,0	8,0	LI	FPM	E
07809BRAGF	BRAG	46,0	64,0	8,0	H	FPM	TB	09217BREF	BRE (108)	8,0	10,8	6,2/10,3	LI	FPM	E
07818BRGGP	BRGG	55,0	70,0	8,5	BI	ACM	A	09222BREF	BRE (108)	8,0	11,5	7/9,5	LI	FPM	E
07819BAG	BAG	45,0	58,0	9,0	BI	NBR	TB	09223BREF	BRE (108)	8,7	12,5	10,0	LI	FPM	E
07820BAG	BAG	50,0	65,0	9,0	LI	NBR	TB	09224BREF	BRE (107)	8,1	13,0	13,5	LI	FPM	E
07821BAG	BAG	52,0	68,0	13,5	LI	NBR	TB	09228BREF	BRE (101)	7,0	11,0	7/10,2	LI	FPM	E
07822BAG	BAG	69,0	85,0	10,0	LI	NBR	TB	09235BREF	BRE (110)	9,0	19,0	15,1	LI	FPM	E
07823BAG	BAG	63,0	80,0	12,0	BI	NBR	TB	09236BREF	BRE (110)	10,0	19,0	15,1	LI	FPM	E
07840BRAGF	BRAG	105,0	130,0	12,0	AH	FPM	TB	09237BREF	BRE (101)	9,0	12,0	7,0	LI	FPM	E
07851BAGE	BAGE (129)	47,6	63,7	10,0	H	ACM	A	09239BREF	BRE (101)	7,0	11,0	10,2	LI	FPM	E
07858BAGEP	BAGE (172)	45,0	72,0	9,5	H	ACM	A	09241NE	NE (233)	7,9	13,5	11,7	LI	MVQ	E
07867BRGP	BRG	36,0	52,0	10,0	AH	ACM	TB	09242BREF	BRE (101)	8,0	12,0	0,6	LI	FPM	E
07868BAGGEF	BAGGE (60)	46,8	69,8	12,0	H	FPM	A	09244BREF	BRE (101)	8,0	10,8	10,4	LI	FPM	E
07870GAE	GAE (208)	22,0	28,0	5,0	LI	NBR	A	09245BREF	BRE (101)	8,0	10,8	10,4	LI	FPM	E
07877GAE	GAE (208)	25,0	35,0	7,0	LI	HNBR	A	09249BREF	BRE (107)	9,6	12,7	7,6	LI	FPM	E
07880BRAGF	BRAG	50,0	65,0	8,0	AH	FPM	TB	09250BREF	BRE (91)	6,0	11,0	17,8	LI	FPM	E
07888GRP	GR	19,0	25,4	4,3	LI	ACM	TB	09251BREF	BRE (108)	7,0	10,9	9,5	LI	FPM	E
07913BAG	BAG	58,0	75,0	15,0	BI	NBR	TB	09254BREF	BRE (101)	8,0	12,0	9,5	LI	FPM	E
07914BAG	BAG	70,0	100,0	13,0	BI	NBR	TB	09255BREF	BRE (108)	7,0	11,0	0,7	LI	FPM	E
07918BRE	BRE (229)	9,5	15,5	5,1	LI	NBR	A	09259BREF	BRE (91)	6,0	10,3	16,0	LI	FPM	E
07919BGE	BGE (100)	110,0	140,0	13,0	BI	NBR	A	09260BREF	BRE (91)	6,0	12,0	19,4	LI	FPM	E
07920BGE	BGE (100)	95,0	120,0	15,0	BI	NBR	A	09261BAEF	BAE	7,0	11,8	10,0	LI	FPM	E
07922GAE	GAE (212)	60,0	70,0	6,0	LI	NBR	A	09262BAEF	BAE	8,0	13,0	10,0	LI	FPM	E
07923GAE	GAE (213)	70,0	80,0	8,0	LI	ACM	A	09264BREF	BRE (91)	5,0	7,8	15,5	LI	FPM	E
07959BRAGEF	BRAGE (104)	145,0	175,0	17,0	BI	FPM	A	09266NEF	NE (34)	5,5	9,2	0,9	LI	FPM	E
07967GA	GA	25,0	32,0	5,0	LI	NBR	TB	09267BREF	BRE (101)	6,0	8,8	10,0	LI	FPM	E
07970BGY	BGY (136)	136,8	165,0	13,0	BI	NBR	I	09271BAEF	BAE	8,5	14,1	13,5	LI	FPM	E
07982BRY	BRY	85,0	105,0	13,0	H	-	I	09272BRE	BRE (101)	8,0	12,0	7,0	LI	FPM	E
07985BRY	BRY	85,0	105,0	13,0	AH	NBR/FPM	I	09280NES	NE (233)	9,5	13,5	11,4	LI	MVQ	E
08306BRP	BR	23,0	36,0	6,0	H	ACM	TB	09282BAEF	BRE (101)	10,0	12,8	6,3/10,2	LI	FPM	E

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Antes de especificar a utilização de um retensor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.  
Before specifying the use of a retainer, please check for availability • 0800 7712155

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## **ANOTAÇÕES**

## **ANOTACIONES<sup>5</sup>** REMARKS

**Antes de especificar a utilização de um retentor, verifique sua disponibilidade. Antes de especificar la aplicación de un retén, verifique la disponibilidad del mismo.**  
Before specifying the use of a retainer, please check for availability • **0800 7712155**

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# **ANOTACÕES**

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# APOIO TOTAL AO MERCADO



## Caderninho Sabó

É o programa de relacionamento da Sabó com os profissionais da reparação automotiva em todo o Brasil. Além de informação e treinamento, oferece um exclusivo pacote de benefícios através do Top Card Sabó.



## TOC

Consultoria técnica Sabó ao mercado, solucionando qualquer dúvida técnica sobre o uso correto dos produtos, tecnologia, treinamentos e garantia.



## Programa Qualifica

Educação continuada, adaptada aos diferentes públicos, objetivando qualificação motivacional, estratégica e gerencial.



## RIA – Rede Interativa Automotiva

Canal de educação à distância (TV Sabó) com comunicação interativa e abrangência nacional, com conteúdo dirigido a temas técnicos, gerenciais e motivacionais.



## Giro na Fábrica

Programa de visitas à fábrica para apresentar a tecnologia, os recursos, as pessoas e os diferenciais de qualidade e produção da Sabó.



## Promotores Sabó

Equipe de apoio ao mercado atendendo: distribuidores, varejo, oficinas e retíficas, identificando parceiros e promovendo relacionamento através de um exclusivo pacote de benefícios.



## Agenda do Carro

Sabó, parceira oficial do Programa Agenda do Carro. Investindo na sua segurança, economia e bem estar, apoiando a manutenção preventiva do seu veículo.



## Sabó Indústria e Comércio de Autopeças Ltda

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**Central de Relacionamento Sabó**  
**0800 77 12 155**

