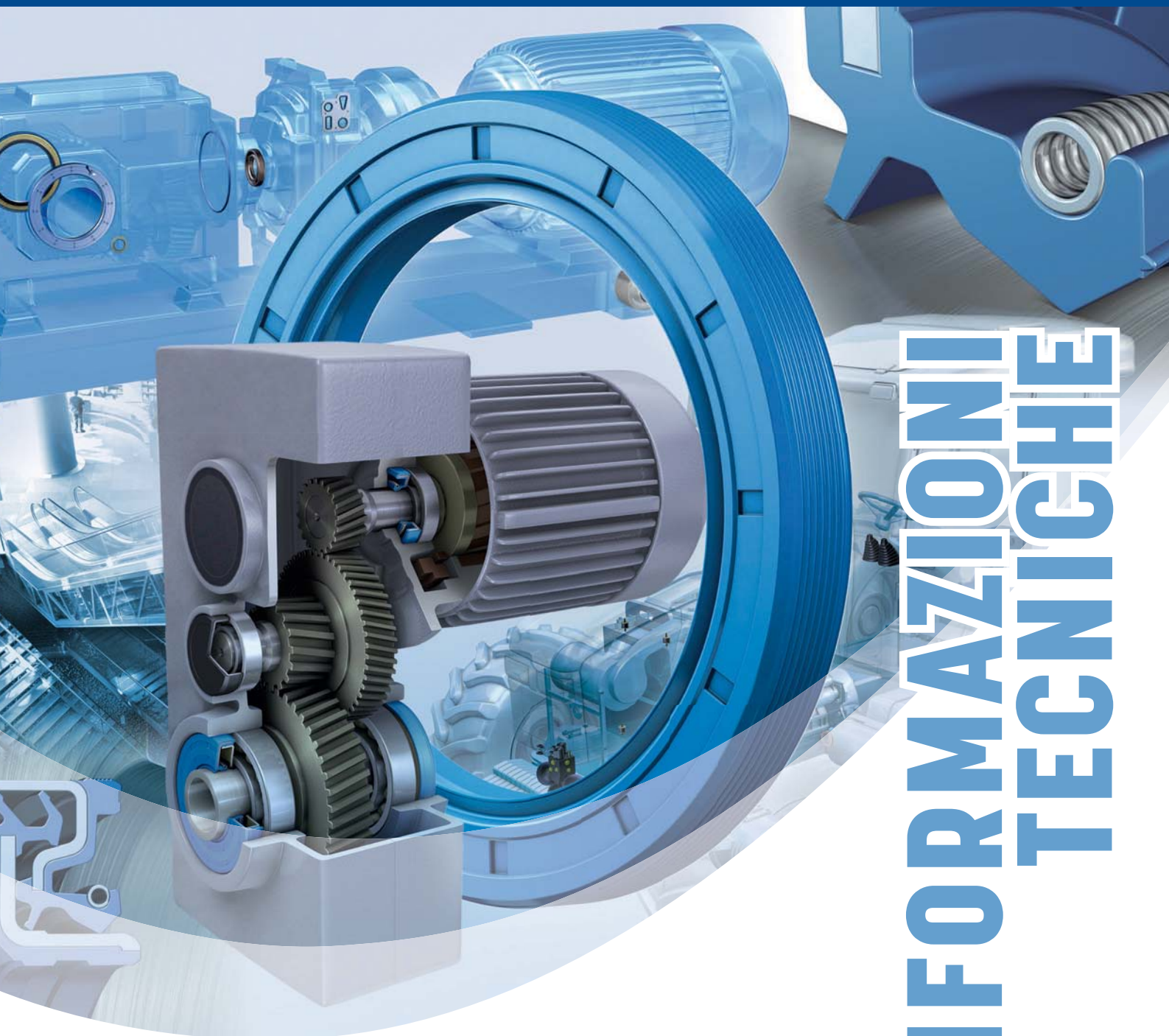
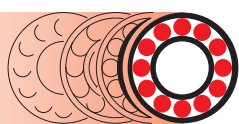


MONTAGGIO TENUTE A CASSETTA FREUDENBERG



**INFORMAZIONI
TECNICHE**



**emporio del
cuscinetto s.r.l.**

forniture industriali



FREUDENBERG

INNOVATING TOGETHER

2024

FREUDENBERG PREFERRED PARTNER

Emporio del Cuscinetto S.R.L.

viene conferita l'onorificenza per un orientamento al cliente di primordine: Prestazioni eccellenti nella consulenza, nella vendita e nel servizio di assistenza.

Gennaio 2024



José Caro

Vice President Global Distribution
Freudenberg Industrial Services

CERCA DISTRIBUTORE
Emporio del Cuscinetto S.R.L.



FREUDENBERG
SEALING TECHNOLOGIES

 **FREUDENBERG**
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Montaggio di Guarnizioni tipo Cassetta

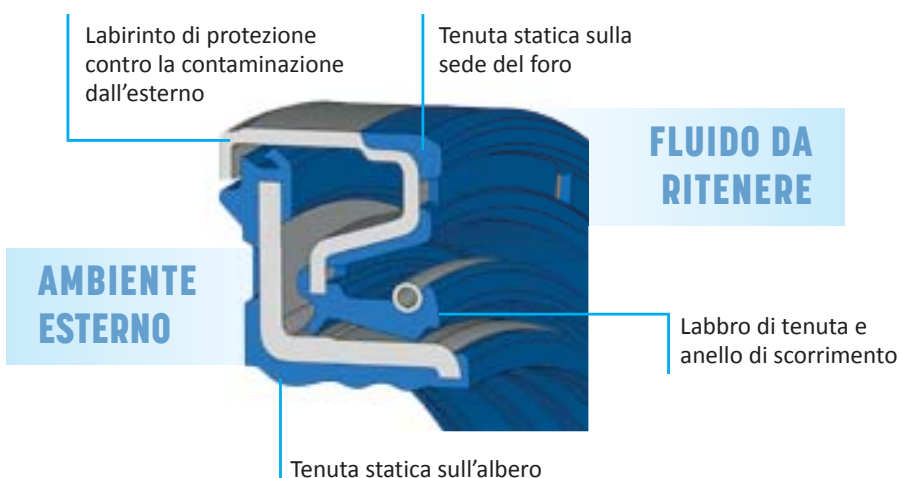
Requisiti dell'albero e del foro

| | |
|---------------------|--|
| Tolleranza: | ISO H8/h8 |
| Smusso del foro: | $20^\circ \pm 5^\circ \times 1 \text{ mm}$ (0.04 in) |
| Smusso dell'albero: | $20^\circ \pm 5^\circ \times 3 \text{ mm}$ (0.12 in) |
| Rugosità: | $R_a = 0,8 \dots 3,2 \text{ }\mu\text{m}$ |
| | $R_z = 10 \dots 16 \text{ }\mu\text{m}$ |

Tipologie di montaggio

- Montaggio per Caso A
- Montaggio per Caso B
- Montaggio per Caso C
- Montaggio per Caso D
- Montaggio per Caso E

Per le forme costruttive senza rivestimento elastomerico sul diametro interno, potrebbe essere necessaria l'applicazione di un sigillante.



- Simmering Cassette Seals sono formate da due componenti, ovvero da un Simmering e da una pista di scorrimento, assemblati in modo irreversibile.

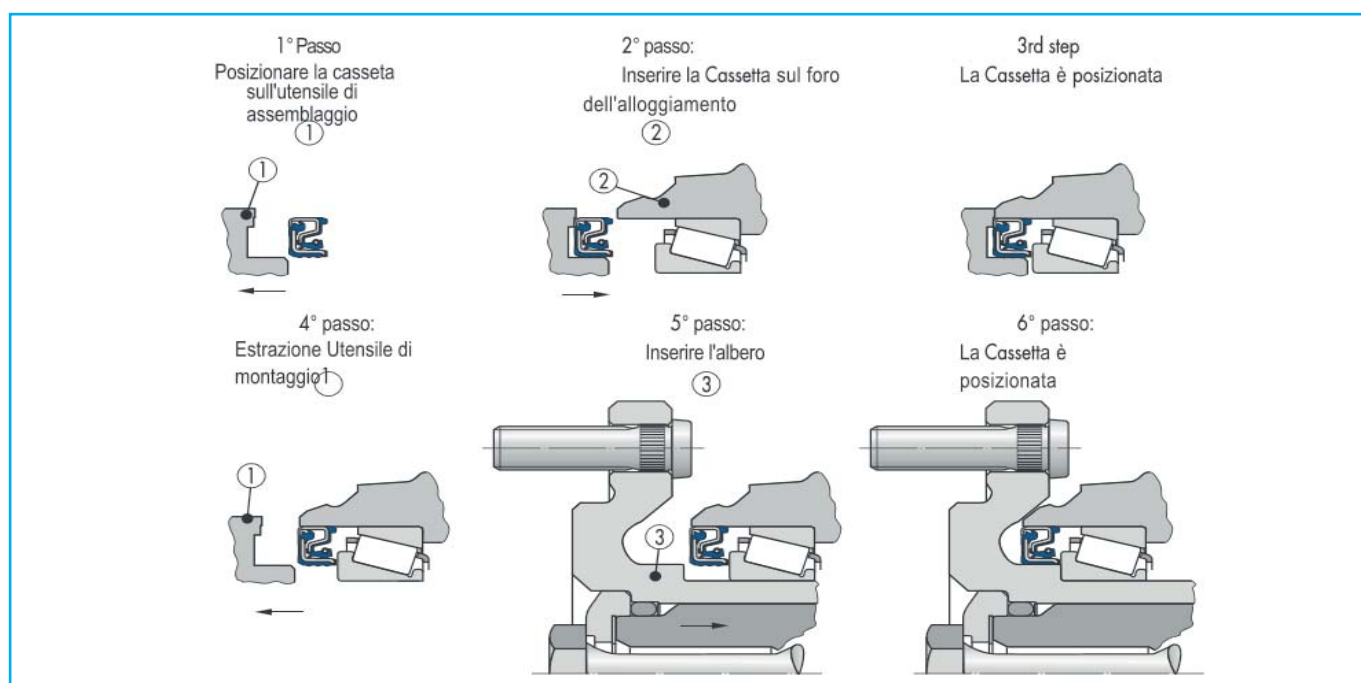


FIGURA 16 - INSTALLAZIONE CASO A CON "ARRESTO SUL CUSCINETTO"

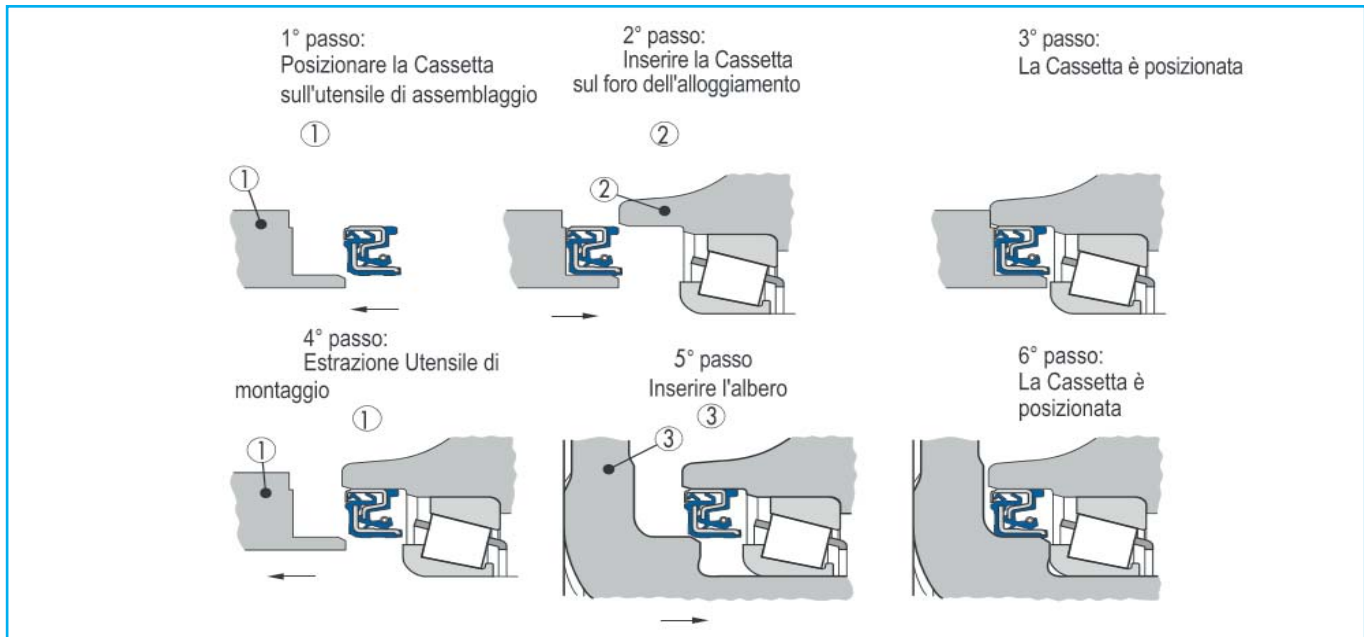


FIGURA 17 - INSTALLAZIONE CASO B SENZA "ARRESTO SUL CUSCINETTO"

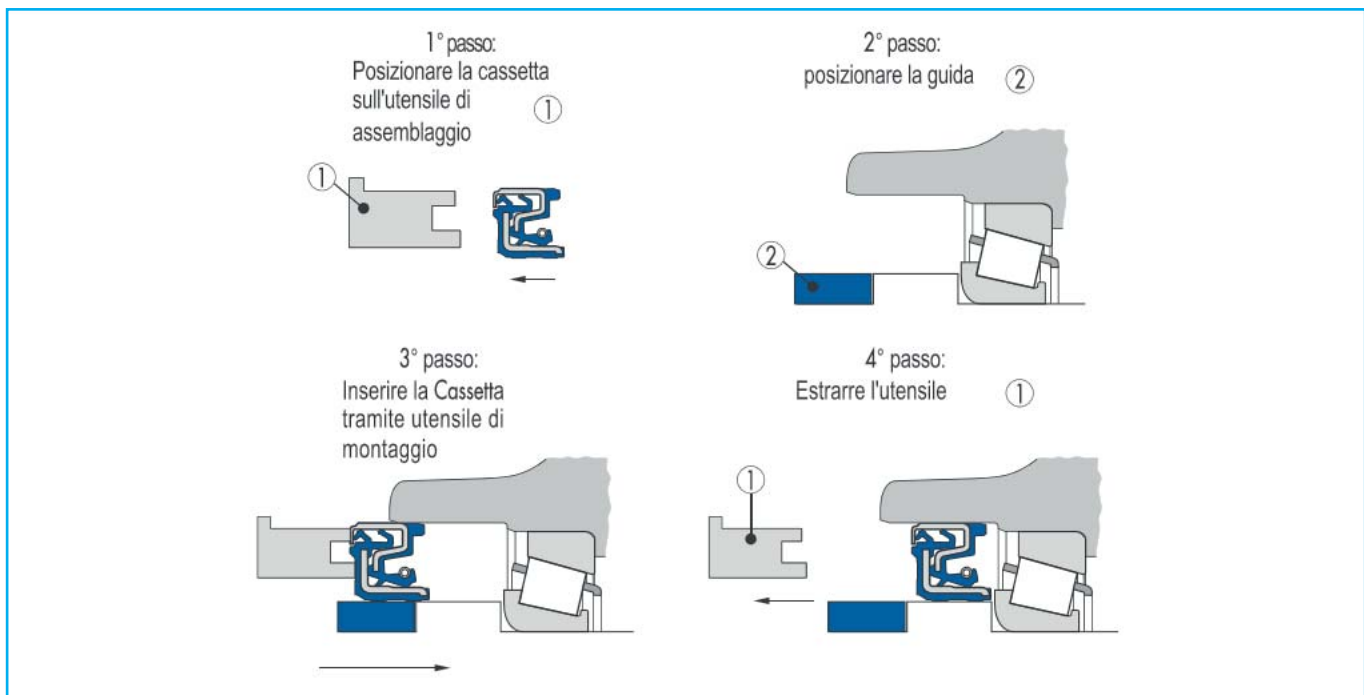


FIGURA 18 - INSTALLAZIONE CASO C ("SIMULTANEAMENTE")

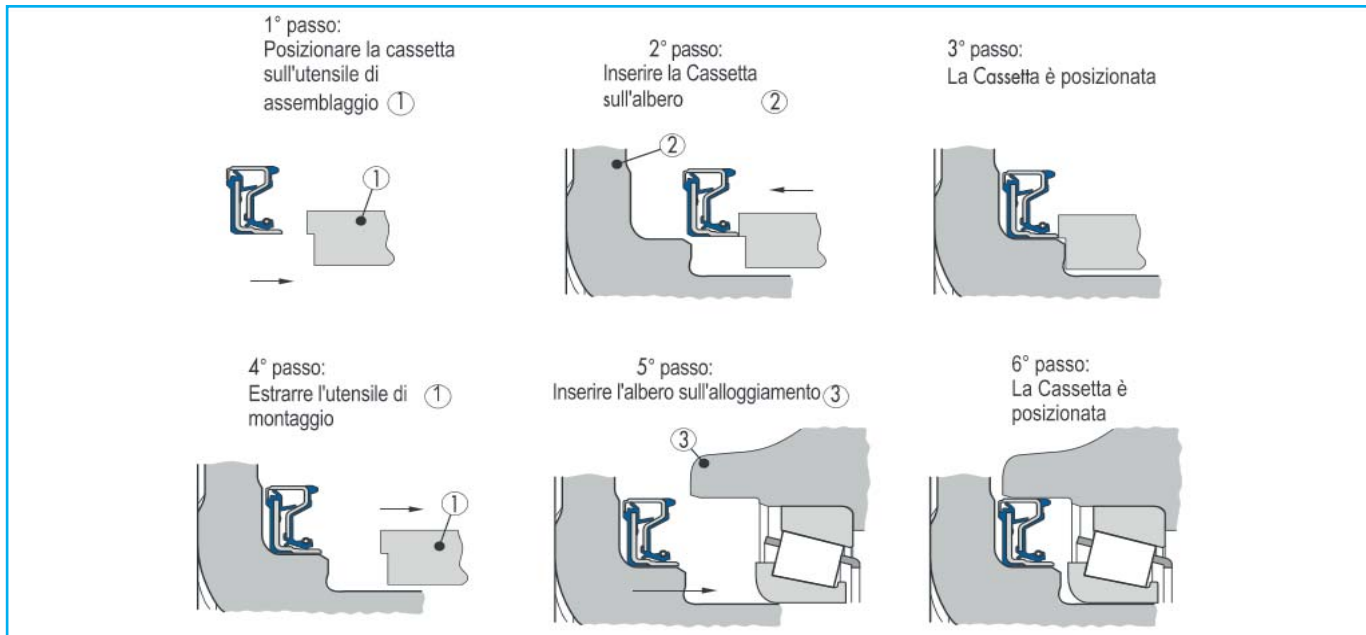


FIGURA 19 - INSTALLAZIONE CASO D ("PRIMA SULL'ALBERO")

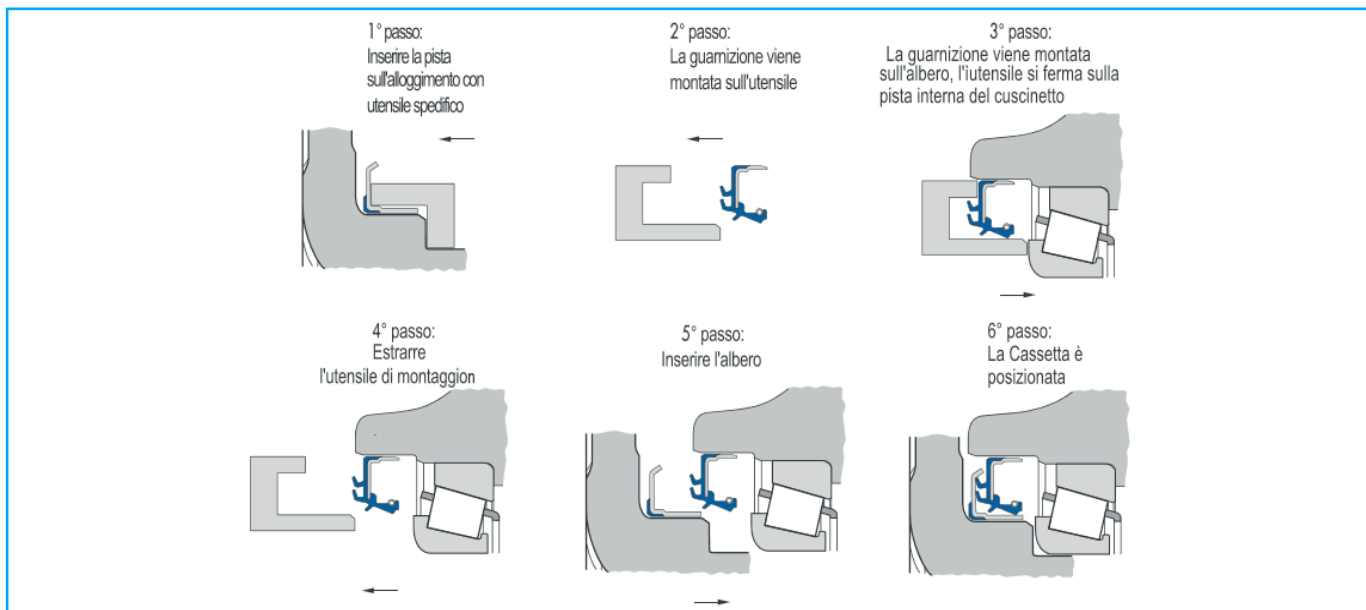




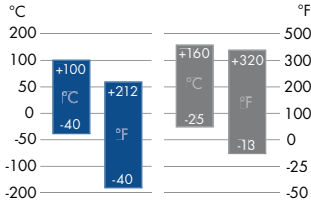
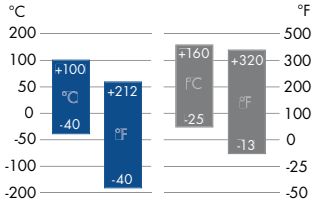
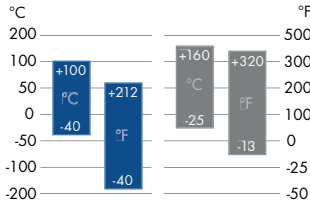

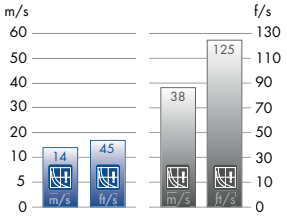
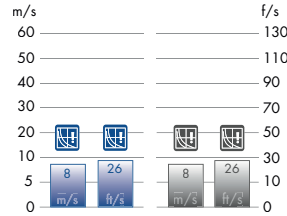
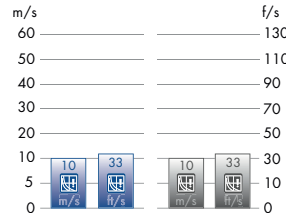







FIGURA 20 - INSTALLAZIONE CASO E ("ASSEMBLAGGIO IN DUE FASI")

| Standard | | A | | AS | | AS | |
|---|------------------------|---|--|--|--|---|-------------------|
| Anelli di tenuta / Simmerring | | | | | | | |
| Tipo | | BA... | | BA...SL | | BABSL | |
| Profilo | |  | |  | |  | |
| Miscela | | NBR 72 NBR 902 | FKM 75 FKM 585 75 FKM 260466 75 FKM 595 | NBR 72 NBR 902 | FKM 75 FKM 585 75 FKM 260466 75 FKM 595 | NBR 72 NBR 902 | FKM 75 FKM 595 |
|  Temperatura | |  | |  | |  | |
|  Velocità | |  | |  | |  | |
|  Pressione | | max. 0,05 MPa max. 7.25 psi | | max. 0,05 MPa max. 7.25 psi | | max. 1 MPa max. 145 psi → Fig. 2, page 22 | |
|  Fluidi | Oli Minerali < +100 °C | ● | ● | ● | ● | ○ | ○ |
| | Oli Sintetici < 80 °C | ● | ○ | ● | ○ | ○ | ○ |
| | Oli Minerali > +100 °C | | ● | | ● | | ● |
| | Oli Sintetici > 80 °C | | ● | | ● | | ● |
| | Grassi | ● | ● | ● | ● | ○ | ○ |
| | Fluidi Agressivi | | | | | | |
|  Sporczia | Sporczia Normale | | | ● | ● | ● | ● |
| | Sporczia Moderata | | | | | | |
| | Sporczia Pesante | | | | | | |
| | Sporczia Molto Elevata | | | | | | |
| Applicazioni Tipiche | |  | | | |  | |

○ = uso possibile

○* = uso possibile previa verifica tecnica

○** = uso possibile previa verifica tecnica

● = utilizzo consigliato






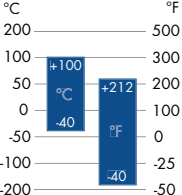
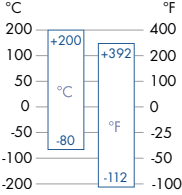
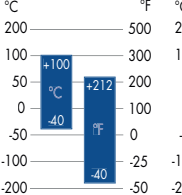
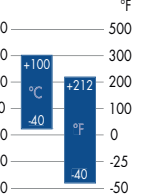

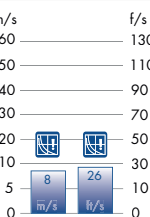
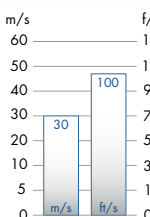
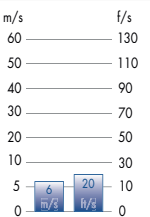
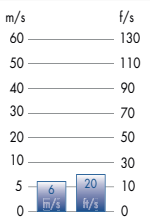



| Standard | | B | BS | C |
|---|-------------------------|---|--|---|
| | | Anelli di tenuta / Simmerring | | |
| Tipo | | B1... | B1...SL | B2... |
| Profilo | |  |  |  |
| Mescola | | NBR 72 NBR 902 | NBR 72 NBR 902 | NBR 72 NBR 902 |
|  Temperatura | |  |  |  |
|  Velocità | |  |  |  |
|  Pressione | | max. 0,05 MPa max. 7.25 psi | max. 0,05 MPa max. 7.25 psi | max. 0,05 MPa max. 7.25 psi |
|  Fluidi | Oli Minerali < +100 °C | ○ | ○ | ○ |
| | Oli Sintetici < 80 °C | ○ | ○ | ○ |
| | Oli Minerali > +100 °C | | | |
| | Oli Sintetici > 80 °C | | | |
| | Grassi | ○ | ○ | ○ |
|  Sporcizia | Fluidi Agressivi | | | |
| | Sporcizia Normale | | ● | |
| | Sporcizia Moderata | | | |
| | Sporcizia Pesante | | | |
| | Sporcizia Molto Elevata | | | |
| Applicazioni Tipiche | |     |     |    |

○ = uso possibile

○* = uso possibile previa verifica tecnica


○** = uso possibile previa verifica tecnica

● = utilizzo consigliato

| Standard | | CS | | A | B |
|---|-------------------------|---|--|---|---|
| Anelli di tenuta / Simmerring | | | | | |
| Tipo | | B2...SL | B2PT | BAOF | B1OF |
| Profilo | |  |  |  |  |
| Mescola | | NBR 72 NBR 902 | PTFE PTFE10/56101 | NBR 72 NBR 902 | NBR 72 NBR 902 |
|  Temperatura | |  |  |  |  |
|  Velocità | |  |  |  |  |
|  Pressione | | max. 0,05 MPa max. 7.25 psi | max. 1 MPa max. 145 psi → Fig. 2, page 22 | - | - |
|  Fluidi | Oli Minerali < +100 °C | ○ | ○ | ○ | ○ |
| | Oli Sintetici < 80 °C | ○ | ○ | ○ | ○ |
| | Oli Minerali > +100 °C | | | | |
| | Oli Sintetici > 80 °C | | | | |
| | Grassi | ○ | ○ | ● | ● |
| | Fluidi Agressivi | | ● | | |
|  Sporcizia | Sporcizia Normale | ● | | ○ | ○ |
| | Sporcizia Moderata | | | ○ | ○ |
| | Sporcizia Pesante | | | | |
| | Sporcizia Molto Elevata | | | | |

| | | | |
|----------------------|---|---|---|
| Applicazioni Tipiche |    |     |   |
|----------------------|---|---|---|

○ = uso possibile
○* = uso possibile previa verifica tecnica
○** = uso possibile previa verifica tecnica
● = utilizzo consigliato

| Standard | | Merkel Radiamatic | Modular Oil Seal (MSS) | |
|---|-------------------------|---|---|---|
| Tipo | | HTS II 9539 | MSS1 | MSS7 |
| Profilo | |  |  |  |
| Mescola | | PTFE Y002 | NBR-FKM 72 NBR 902/ 75 FKM 585 | FKM-FKM 75 FKM 585/ 75 FKM 585 |
|  Temperatura | |  |  |  |
|  Velocità | |  |  |  |
|  Pressione | | max. 0,6 MPa max. 87 psi | max. 0,05 MPa max. 7.25 psi | max. 0,05 MPa max. 7.25 psi |
|  Fluidi | Oli Minerali < +100 °C | ● | ● | ○ |
| | Oli Sintetici < 80 °C | ● | ● | ○ |
| | Oli Minerali > +100 °C | ● | ● | ○ |
| | Oli Sintetici > 80 °C | ● | ● | ○ |
| | Grassi | ● | | ○ |
| | Fluidi Agressivi | ● | | |
|  Sporcizia | Sporcizia Normale | ○ | ● | ● |
| | Sporcizia Moderata | ○ | | ○ |
| | Sporcizia Pesante | | | ● |
| | Sporcizia Molto Elevata | | ● | ● |
| Applicazioni Tipiche | |  |  |  |

○ = uso possibile

○* = uso possibile previa verifica tecnica

○** = uso possibile previa verifica tecnica

● = utilizzo consigliato




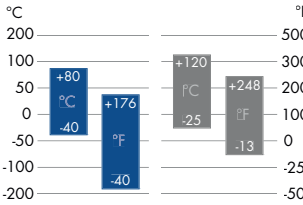
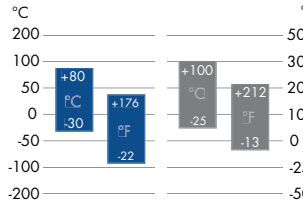
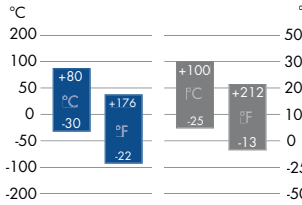
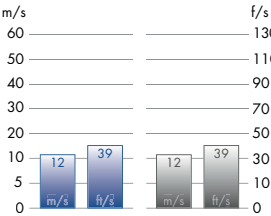
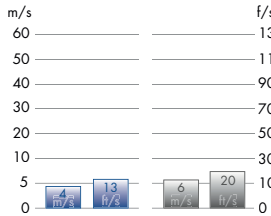
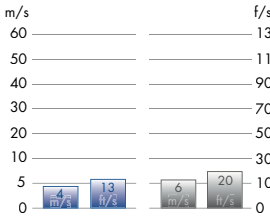






| Standard | | Tenute a Cassetta | | | | | |
|---|-------------------------|---|-------------------|---|-------------------|---|-------------------|
| Tipo | | TIPO 1 | | TIPO 2 | | TIPO 3 | |
| Profilo | |  | |  | |  | |
| Mescola | | NBR 75 NBR 106200 | FKM 75 FKM 595 | NBR 75 NBR 106200 | FKM 75 FKM 595 | NBR 75 NBR 106200 | FKM 75 FKM 595 |
|  Temperatura | |  | |  | |  | |
|  Velocità | |  | |  | |  | |
|  Pressione | | max. 0,05 MPa max. 7.25 psi | | max. 0,05 MPa max. 7.25 psi | | max. 0,05 MPa max. 7.25 psi | |
|  Fluidi | Oli Minerali < +100 °C | ● | ● | ● | ● | ● | ● |
| | Oli Sintetici < 80 °C | ● | ○ | ● | ○ | ● | ○ |
| | Oli Minerali > +100 °C | ○ | ● | ○ | ● | ○ | ● |
| | Oli Sintetici > 80 °C | ○ | ● | ○ | ● | ○ | ● |
| | Grassi | ● | ● | ● | ● | ● | ● |
| | Fluidi Agressivi | | | | | | |
|  Sporcizia | Sporcizia Normale | ● | | | | | |
| | Sporcizia Moderata | | | ● | | | |
| | Sporcizia Pesante | | | | | ● | |
| | Sporcizia Molto Elevata | | | | | | |
| Applicazioni Tipiche | |  | |  | |  | |

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○** = uso possibile previa verifica tecnica

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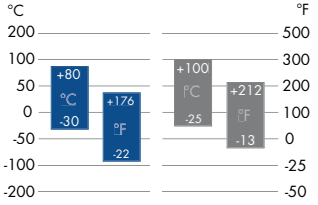
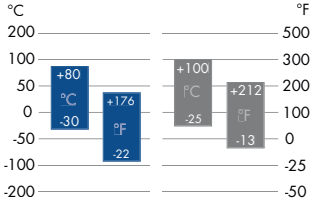
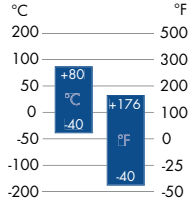

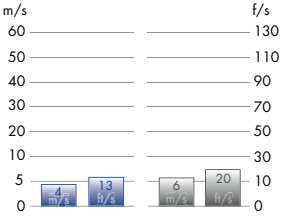
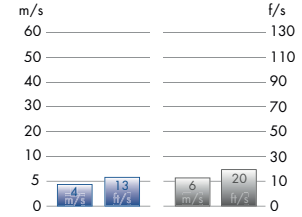
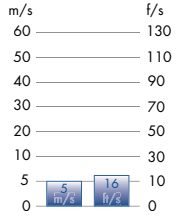






| Standard | | Tenute a Cassetta | | | | | |
|---|-------------------------|---|-------------------|---|-------------------|---|-------------------|
| Tipo | | HS | | SF | | SF6 | |
| Profilo | |  | |  | |  | |
| Mescola | | NBR 75 NBR 106200 | FKM 75 FKM 585 | NBR 75 NBR 106200 | FKM 75 FKM 595 | NBR 75 NBR 106200 | FKM 75 FKM 595 |
|  Temperatura | |  | |  | |  | |
|  Velocità | |  | |  | |  | |
|  Pressione | | max. 0,03 MPa max. 4,35 psi | | max. 0,05 MPa max. 7.25 psi | | max. 0,05 MPa max. 7.25 psi | |
|  Fluidi | Oli Minerali < +100 °C | ● | ● | ● | ● | ● | ● |
| | Oli Sintetici < 80 °C | ● | ○ | ● | ○ | ● | ○ |
| | Oli Minerali > +100 °C | | ● | | ● | | ● |
| | Oli Sintetici > 80 °C | ○ | ● | ○ | ● | ○ | ● |
| | Grassi | ○ | ● | ● | ● | ● | ● |
| | Fluidi Agressivi | | | | | | |
|  Sporcizia | Sporcizia Normale | ○ | | ○ | | ○ | |
| | Sporcizia Moderata | ● | | ● | | ● | |
| | Sporcizia Pesante | | | | | | |
| | Sporcizia Molto Elevata | | | | | | |
| Applicazioni Tipiche | |  | |  | |  | |

○ = uso possibile

○* = uso possibile previa verifica tecnica

○** = uso possibile previa verifica tecnica

● = utilizzo consigliato



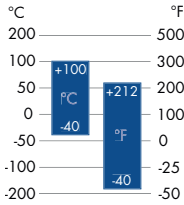






| Standard | | Combi Seal | | | | |
|---|-------------------------|---|-------------------|---|-------------------|---|
| Tipo | | SF8 | | SF19 | | COMBI SEAL |
| Profilo | |  | |  | |  |
| Mescola | | NBR 75 NBR 106200 | FKM 75 FKM 595 | NBR 75 NBR 106200 | FKM 75 FKM 595 | NBR 75 NBR 106200 |
|  Temperatura | |  | |  | |  |
|  Velocità | |  | |  | |  |
|  Pressione | | max. 0,05 MPa max. 7.25 psi | | max. 0,05 MPa max. 7.25 psi | | max. 0,05 MPa max. 7.25 psi |
|  Fluidi | Oli Minerali < +100 °C | ● | ● | ● | ● | ● |
| | Oli Sintetici < 80 °C | ● | ○ | ● | ○ | ● |
| | Oli Minerali > +100 °C | | ● | | ● | |
| | Oli Sintetici > 80 °C | ○ | ● | ○ | ● | ○ |
| | Grassi | ● | ● | ● | ● | ● |
| | Fluidi Agressivi | | | | | |
|  Sporcizia | Sporcizia Normale | ○ | | ○ | | ○ |
| | Sporcizia Moderata | ● | | | | ● |
| | Sporcizia Pesante | | | ● | | |
| | Sporcizia Molto Elevata | | | | | |
| Applicazioni Tipiche | |  | |  | |  |

○ = uso possibile

○* = uso possibile previa verifica tecnica

○** = uso possibile previa verifica tecnica

● = utilizzo consigliato

| Standard | | |
|---|-------------------------|---|
| | | TAPPI DI CHIUSURA |
| Tipo | | GA, GSA |
| Profilo | |  |
| Mescola | | |
|  Temperatura | |  |
|  Velocità | | - |
|  Pressione | | - |
|  Fluidi | Oli Minerali < +100 °C | • |
| | Oli Sintetici < 80 °C | • |
| | Oli Minerali > +100 °C | |
| | Oli Sintetici > 80 °C | |
| | Grassi | • |
| | Fluidi Agressivi | |
|  Sporcizia | Sporcizia Normale | • |
| | Sporcizia Moderata | • |
| | Sporcizia Pesante | • |
| | Sporcizia Molto Elevata | |
| Applicazioni Tipiche | |   |

○ = uso possibile

○* = uso possibile previa verifica tecnica

○** = uso possibile previa verifica tecnica

● = utilizzo consigliato



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cuscinetto s.r.l.**

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