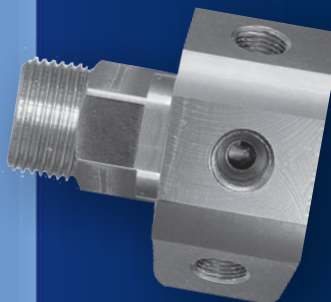
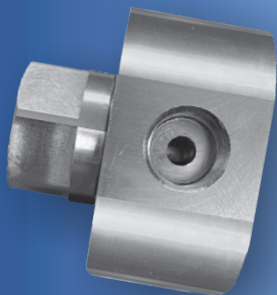




ROTARY JOINTS







SALA BOLOGNESE (BO) - ITALIA - *ITALY* - SINTERIZZATI - *SINTERED*



SALA BOLOGNESE (BO) - ITALIA - *ITALY* - PNEUMATICA - *PNEUMATIC*



SAULIEU - FRANCIA - *FRANCE*



CORFÙ - GRECIA - *GREECE*



SHANGHAI - CINA - *CHINA*

Copertina <i>Cover</i>		01
Le nostre Sedi <i>Our Locations</i>		03
Indice generale <i>Index</i>		04
Condizioni generali di vendita <i>General Sales Conditions</i>		05
SAS Sales Network <i>SAS Sales Network</i>		06
Fascicoli e cataloghi tecnici <i>Technical Catalogs</i>		07
Giunto rotante femmina ad una via <i>One Way Female Rotary Joint</i>		09
Giunto rotante maschio ad una via <i>One Way Male Rotary Joint</i>		09
Condizioni di funzionamento - Disegni tecnici <i>Operating Conditions - Technical drawings</i>		10 - 12
Giunto rotante femmina a tre vie <i>Three Way Female Rotary Joint</i>		13
Giunto rotante femmina a sei vie <i>Six Way Female Rotary Joint</i>		13
Annotazioni <i>Notes</i>		14



Dal 1978 produciamo componenti meccanici sinterizzati su disegno del Cliente e boccole sinterizzate in ferro ed in bronzo sia cilindriche che flangiate. La produzione comprende anche le bronzine autolubrificanti con tolleranze Fips, marchio rilevato negli anni novanta. Realizziamo inoltre una vasta gamma di accessori e componenti per la Pneumatica, commercializzati in oltre 70 nazioni sia direttamente che come prodotti OEM. Produciamo infine filtri sinterizzati su disegno, utilizzando il bronzo sferico, l'acciaio inossidabile Aisi 316L (in filo ed in polvere), la ceramica e la plastica porosa.

Since 1978 we have been producing sintered mechanical components based on the customer's design and sintered bushings in iron and bronze, both cylindrical and flanged. The production also includes self-lubricating bushings with Fips tolerances, a brand taken over in the nineties. We also produce a wide range of accessories and components for pneumatics, marketed in over 70 countries both directly and as OEM products. Finally, we produce customized sintered filters, using spherical bronze, Aisi 316L stainless steel (in wire and powder), ceramic and porous plastic.



RESA MERCE: Franco nostro magazzino - **IMBALLO:** 1% - **TRASPORTO:** Sempre a rischio del destinatario anche se la merce è venduta in porto franco. Si prega di voler sempre indicare sugli ordini il nominativo del proprio corriere. In mancanza di tale indicazione decliniamo ogni responsabilità per eventuali disagi. **MATERIALI RESI:** Non si accetta merce di ritorno senza nostra preventiva autorizzazione ed in ogni caso il reso dovrà avvenire in porto franco. **CONTESTAZIONI:** Non si accettano reclami 8 giorni dopo il ricevimento della merce - **PAGAMENTI:** Le condizioni di pagamento saranno quelle concordate ed indicate in fattura e sono vincolanti. Trascorre le scadenze convenute saranno conteggiati gli interessi di mora calcolati secondo il tasso bancario medio praticato alla data del pagamento - **FORO COMPETENTE:** Bologna - **RISERVA DI PROPRIETÀ:** La merce consegnata rimane di riservato dominio della fornitrice, fino all'avvenuto pagamento - **GARANZIE:** I nostri prodotti sono garantiti da polizza R.C. prodotti.



DELIVERY TERMS: ExW SAS Sinterizzati's Plant - **PACKING:** 1% - **TRANSPORT:** The risk of transport is carried by the customer, even if it has been agreed that we will take care of, organize or be otherwise involved in the transport. The Customer must always communicate the name of the Carrier. Without such indication we don't accept any liability in case of failures - **RETURNED PRODUCTS:** Subject to SAS's prior written authorization, non-complying products may be returned by Customer at its own expense - **COMPLAINTS:** Any hidden defects of the products must be reported by Customer within 8 days of their receipt - **TERMS OF PAYMENT:** The prices of the products shall be those stated in the corresponding Order Confirmation and Invoice. In case of failure by Customer to pay any amount due, SAS Sinterizzati Srl shall be entitled to calculate interests in arrears as per Legislative Decree - **JURISDICTION COURT:** Bologna - **PRODUCTS PROPERTY:** All goods remain the property of SAS Sinterizzati Srl until payment in full is received - **WARRANTY:** SAS products are guaranteed by insurance R.C.



CONDITIONS DE LIVRAISON: ExW SAS Sinterizzati - **EMBALLAGE:** 1% du montant de la facture - **TRANSPORT:** Le risque du transport est de la responsabilité du client. Le client doit toujours communiquer le nom du transporteur. Sans ces indications, nous dégageons toute responsabilité dans le cas de problème - **RETOUR DE PRODUITS:** Sans accord écrit de SAS Sinterizzati, tous les coûts concernant le retour de marchandise ne pourront être pris en charge par SAS Sinterizzati - **RÉCLAMATIONS:** Toute non-conformité de produit devra être communiquée sous un délai de 8 jours maximum à réception des marchandises pour que la réclamation puisse être prise en compte - **CONDITIONS DE PAIEMENT:** Les prix et délais de paiement des produits sont ceux qui sont précisés sur nos propositions, confirmation de commande et facturation. Toute facture dont le paiement ne serait pas effectué à la date d'échéance donnera lieu à des calculs d'intérêt suivant décret législatif - **CLAUDE ATTRIBUTIVE DE JURIDICTION:** En cas de différend, le Tribunal de Bologne est seul compétent - **RÉSERVE DE PROPRIÉTÉ:** Le transfert de propriété des marchandises livrées est différé jusqu'au paiement intégral du prix correspondant - **GARANTIE:** Les produits de SAS Sinterizzati sont garantis par une assurance de responsabilité civile.



LIEFERBEDINGUNGEN: ExW SAS Sinterizzati's Werk - **VERPACKUNG:** 1% - **TRANSPORT:** Das Transportrisiko wird vom Kunden getragen, auch wenn es vereinbart wurde, wir kümmern uns um, organisieren oder werden anderweitig am Transport beteiligt. Der Kunde muss immer den Namen des Luftfrachtführers mitteilen. Ohne solche Angabe übernehmen wir keine Haftung bei Ausfällen - **RÜCKGABEPRODUKTE:** Vorbehaltlich der vorherigen schriftlichen Genehmigung von SAS können nicht abweichende Produkte vom Kunden auf eigene Kosten zurückgesandt werden - **BESCHWERDEN:** Alle verborgenen Mängel der Produkte sind zu melden vom Kunden innerhalb von 8 Tagen nach deren Eingang - **ZAHLUNGSBEDINGUNGEN:** Die Preise der Produkte sind diejenigen, die in der entsprechenden Widerrufserklärung angegeben sind. SAS Sinterizzati Srl ist berechtigt, die Verzugszinsen nach dem Gesetzdekret zu berechnen - **GERICHTSSTANDSGERICHT:** Bologna - **PRODUKTE EIGENTUM:** Alle Waren bleiben Eigentum von SAS Sinterizzati Srl bis zur vollständigen Bezahlung erhalten - **WAIRRANTY:** SAS Produkte werden durch Versicherung RC garantiert



ENTREGA DE LA MERCANCÍA: Disponible para el adquirente en nuestro almacén - **EMBALAJE:** 1% - **TRANSPORTE:** Es siempre a riesgo del receptor/adquirente aún cuando la mercancía es vendida en puerto gratuito. Se pide de indicar siempre en los pedidos el nombre de vuestra empresa de transporte/transportista. En ausencia de tal indicación, no aceptamos ninguna responsabilidad por cualquier malentendido o error - **MERCANCÍA DEVUELTA:** No aceptamos devolución de mercancía sin nuestra autorización previa y en cualquier caso la devolución deberá ser hecha a cargo del adquirente. **CONTESTACIONES:** No aceptamos quejas/reclamos 8 días después de la recepción de la mercancía - **PAGOS:** Las condiciones de pago serán las acordadas e indicadas en la factura y son vinculantes. Pasados los plazos acordados, serán aplicados los intereses de demora calculados según el interés bancario promedio aplicado en la fecha de pago - **JURISDICCION:** Bolonia - **RESERVA DE PROPIEDAD:** La mercancía suministrada sigue siendo de nuestra propiedad hasta que el adquirente haya realizado el pago completo de todo - **GARANCIAS:** Nuestros productos están asegurados por la póliza R.C. Products.



ENTREGA: Em nosso depósito - **EMBALAGEM:** 1% - **TRANSPORTE:** Todos os riscos são responsabilidades do destinatário inclusive quando a entrega for em franco de porte. Indicar sempre o nome do transportador no pedido de compra. Na falta de tal indicação não nos responsabilizamos por qualquer transtorno - **DEVOLUÇÕES:** Não serão aceitas devoluções de mercadorias sem a nossa prévia concordância e em todos os casos tais procedimentos serão custeados pelo emissor - **RECLAMAÇÕES:** Todas as reclamações deverão ser apresentadas em até 8 dias após a entrega da mercadoria - **CONDIÇÕES DE PAGAMENTO:** As condições de pagamento serão previamente acordadas e indicadas no pedido de compra sendo as mesmas indispensáveis. Findo o prazo limite de vencimento estipulado, reservamo-nos o direito de aplicar juros bancários até a regularização do pagamento - **FORO COMPETENTE:** Bolonha - **RESERVA DE PROPRIEDADE:** Até a completa finalização dos pagamentos em aberto, reservamo-nos o direito de propriedade da mercadoria fornecida - **GARANTIA:** Nossos produtos são assegurados por uma empresa de responsabilidade civil.



ÅTERSTÄLL VAROR: Ex-verk från vårt lager - **FÖRPACKNING:** 1% - **TRANSPORT:** Alltid på mottagarens risk även om varorna säljs. Vill du alltid ange namnet på din kurir vid beställningar. I avsaknad av denna indikation, avisar vi något ansvar för eventuella fel. **ÅTERBETALAT MATERIAL:** Återlämnade varor accepteras inte utan vårt förhandsgodkännande och i vilket fall som helst måste returen betalas. **TVISTER:** klagomål accepteras inte 8 dagar efter mottagandet av varorna - **BETÄLLNINGAR:** Betalningsvillkoren är de som avtalats och anges på fakturan och är bindande. När de överenskomna tidsfristerna har gått, beräknas standarddräntan beräknas enligt den genomsnittliga bankräntan som tillämpades på betalningsdatumet - **JURISDIKTION:** Bologna - **RESERVE AV ÄGARE:** Levererade varor förblir leverantörens reserverade domän tills betalning har gjorts - **GARANTIER:** I våra produkter garanteras av en RC-policy produkter.



LEVERINGSBETINGELSER: EXW SAS - **PAKKEOMKOSTNINGER:** 1% - **FORSENDELSE:** Risikoen for transport er pålagt modtageren af varen Selv om afsender er involveret i forsendelsen. Kunden skal altid informere om transportøren som skal bruges, uden denne Acceptere vi ikke klager såfremt noget går galt - **RETURNEREDE VARE:** Omkostninger ved tilbage levering, tilfaldet køber - **KLAGER:** ved fejl og mangler skal der informeres skriftligt inden 8 dage fra modtagelse af varen - **BETALINGSBETINGELSER:** Priserne er ifølge fremsendte ordrebekræftelser og fakturaer. Såfremt betaling ikke bliver modtaget i henhold til dette, vil SAS sende faktura på renter og omkostninger med dette - **LOV AFGØRELSE:** Bologna - **EJENDOMSRET AF VARENE:** Indtil fuld betaling er modtaget er ejendomsretten af varen SAS - **GARANTI:** Varene er forsikret under R.C.



交货条款: SAS 工厂交货 - 包装: 1% - 运输: 运输风险由客户承担, 即使运输是我们同意照看或得组织或者以其它方式参与客户必须一直保持与承运人的联系, 否则如果运输失败, 我们不承担任何责任。 - 退回产品: 经SAS事先书面确认的, 不符合规定的产品可由客户自费退回 - 投诉: 产品的任何隐藏缺陷必须在收到后8天内由客户报告 - 付款条款: 产品的货款应为相应订单和发票确认的价格。如客户未能支付任何款项, SAS Sinterizzati Srl有权根据法令计算拖欠的利息。管辖法院: 博洛尼亚 - 产品财产: 所有货物仍然是SAS Sinterizzati Srl的财产直到收到全额付款 - 保证: SAS产品由保险R.C.



Στις εγκαταστάσεις μας ΣΥΣΚΕΥΑΣΙΑ: 1% - **ΜΕΤΑΦΟΡΑ:** Πάντα σε κίνδυνο του παραλήπτη, ακόμη και αν έχει συμφωνηθεί ότι θα τα φροντίσουμε, θα οργανώσουμε ή θα συμμετάσχουμε με άλλο τρόπο στη μεταφορά. Ο Πελάτης πρέπει πάντα να γνωστοποιεί το όνομα του Μεταφορέα. Ελλείψει τέτοιων ενδείξεων, παραβλέπουμε οποιαδήποτε ευθύνη για τυχόν σφάλματα. **ΕΠΙΣΤΡΟΦΕΣ ΥΛΙΚΩΝ:** Δεν δεχόμαστε τα εμπορεύματα επιστροφής χωρίς την προηγούμενη εξουσιοδότησή μας και σε κάθε περίπτωση η επιστροφή πρέπει να γίνει από τον Πελάτη με δική του έξοδα. **ΠΑΡΑΤΑΞΙΑ:** Δεν δεχόμαστε παράταξη 8 ημέρες μετά την παραλαβή των αγαθών. **ΠΛΗΡΩΜΕΣ:** Οι όροι πληρωμής θα είναι εκείνοι που έχουν συμφωνηθεί και αναγράφονται στο τιμολόγιο και είναι δεσμευτικοί. Μετά τις συμφωνημένες προθεσμίες θα υπολογίζονται τόκοι υπερημερίας που υπολογίζονται με βάση το μέσο τραπεζικό επιτόκιο χρέωσης κατά την ημερομηνία της πληρωμής. **ΔΙΚΑΙΟΔΟΣΙΑ:** Δικαιοσύνη της Ηπείρου. **ΚΡΑΤΗΣΗ ΙΔΙΟΚΤΗΣΙΑΣ:** Όλα τα αγαθά παραμένουν στην ιδιοκτησία του προμηθευτή μέχρι την πλήρη εξόφληση. **ΕΓΓΥΗΣΕΙΣ:** Ό Τα προϊόντα μας είναι εγγυημένα από την ασφάλεια R.C.



- SALA BOLOGNESE (BO)
- SAULIEU

RETE VENDITA PAESI EXTRA EUROPEI
EXTRA EUROPEAN COUNTRIES SALES NETWORK

ARGENTINA	CINA	ISRAELE	NUOVA ZELANDA	TAILANDIA
AUSTRALIA	GIAPPONE	MALESIA	PORTOGALLO	TAIWAN
CANADA	GIORDANIA	MAROCCO	SINGAPORE	U.S.A.
CILE	INDIA	MESSICO	SUD AFRICA	VENEZUELA

ATEX



ATEX

SILENZIATORI



SILENCERS

REGOLATORI



REGULATORS

RACCORDI



FITTINGS

ACCESSORI



ACCESSORIES

FILTRI PER COLLA



GLUE FILTERS

TUBI E SPIRALI BASIC



TUBES BASIC

TUBI E SPIRALI
PROFESSIONAL



TUBES PROFESSIONAL

VIBRATORI PNEUMATICI



PNEUMATIC VIBRATORS

GIUNTI ROTANTI



ROTARY JOINTS

LAME D'ARIA



MODULAR AIR WINGS®

TUBI REFRIGERATORI
PNEUMATICI



ICE VALVE
PANEL COOLER

ATTUATORI PNEUMATICI



ACTUATORS

VALVOLE A SFERA
E FARFALLA



VALVES

VALVOLE AUSILIARIE



AUXILIARY VALVES

ELETTOVALVOLE



SOLENOID VALVES

ISOLE DI VALVOLE



ISLES OF VALVES

CILINDRI



CYLINDERS

CILINDRI ELETTRICI



ELECTRIC CYLINDERS

HANDLING



HANDLING

FISSAGGI



CYLINDER'S
MOUNTING PARTS

TRATTAMENTO ARIA



AIR TREATMENT
A-D-X - TYPE

VACUUM



VACUUM

MOTORI AD ARIA



AIR MOTORS

PIASTRE DI MASSA



GROUND PLATES

EXTRA



EXTRA

FILTRI



FILTERS

BOCCOLE SINTERIZZATE



SINTERED BEARINGS

BOCCOLE KU
AUTOLUBRIFICANTI



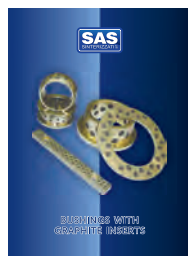
SLIDING BEARINGS

BOCCOLE
AUTOLUBRIFICANTI FIPS



FIPS® SINTERED
BEARINGS

BOCCOLE CON INSERTI
IN GRAFITE



BUSHINGS WITH
GRAPHITE INSERTS

SPINE E RULLINI



PINS AND ROLLERS

ACCIAIO INOX

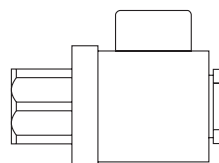


STAINLESS STEEL

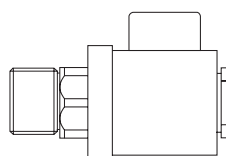


Per visualizzare e scaricare i PDF dei Fascicoli Tecnici SAS:
To view and download the PDFs of the SAS Technical Files:

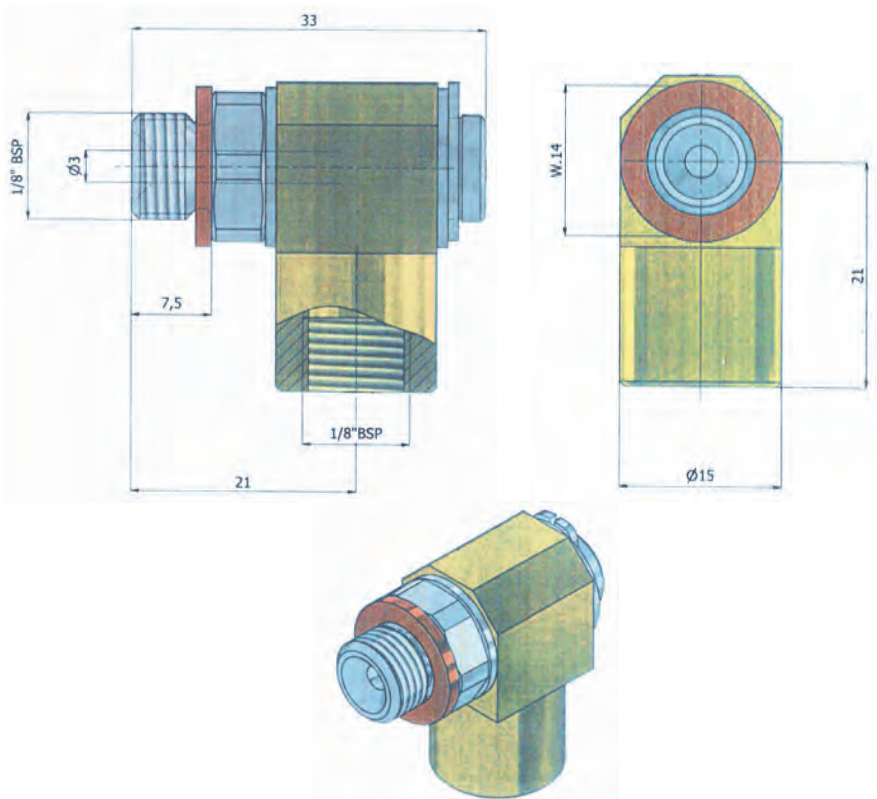
www.sassinterizzati.com/download

GIUNTO ROTANTE FEMMINA AD UNA VIA
ONE WAY FEMALE ROTARY JOINT


COD	ENTRATA - <i>INLET</i>	USCITA - <i>OUTLET</i>	MOQ
GRF-1-1/8"	1-G 1/8"	1-G 1/8"	1
GRF-1-1/4"	1-G 1/4"	1-G 1/4"	1
GRF-1-3/8"	1-G 3/8"	1-G 3/8"	1
GRF-1-1/2"	1-G 1/2"	1-G 1/2"	1
GRF-1-3/4"	1-G 3/4"	1-G 3/4"	1
GRF-1-1"	1-G 1"	1-G 1"	1

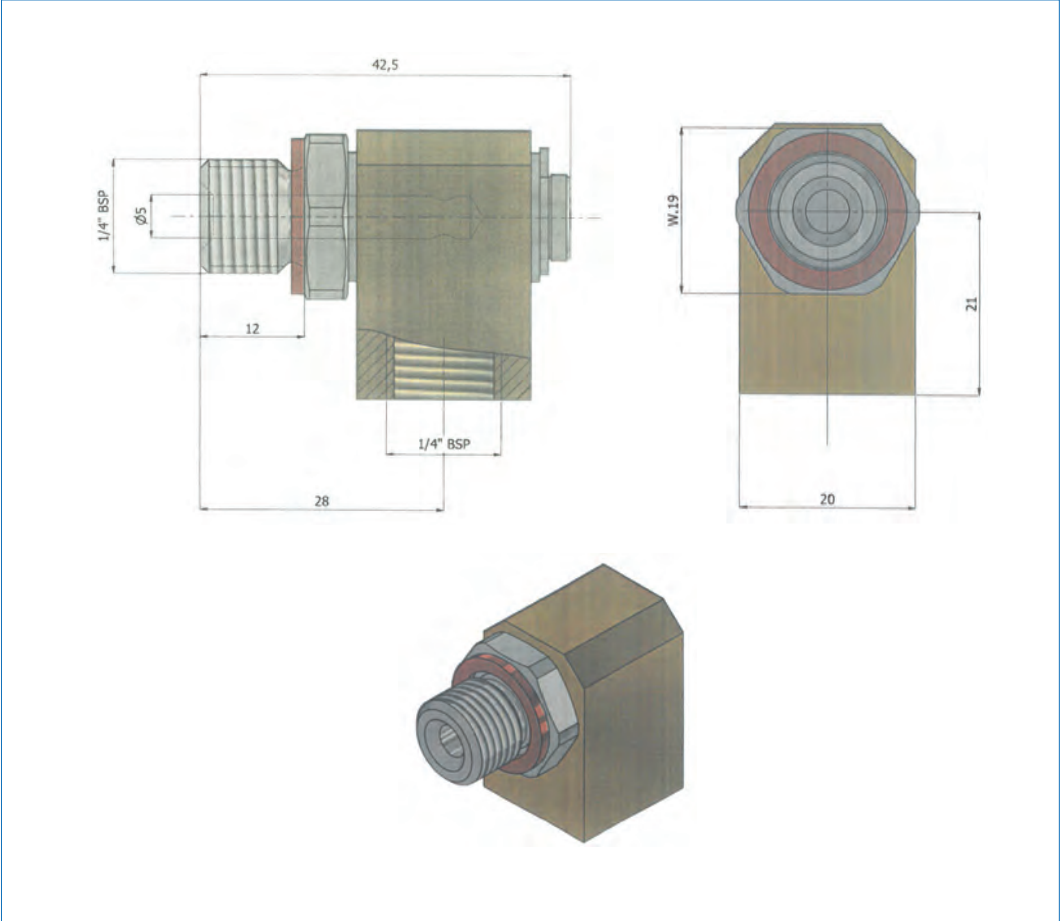
 GIUNTO ROTANTE MASCHIO AD UNA VIA
ONE WAY MALE ROTARY JOINT


COD	ENTRATA - <i>INLET</i>	USCITA - <i>OUTLET</i>	MOQ
GRF-1-1/8"	1-G 1/8"	1-G 1/8"	1
GRF-1-1/4"	1-G 1/4"	1-G 1/4"	1
GRF-1-3/8"	1-G 3/8"	1-G 3/8"	1
GRF-1-1/2"	1-G 1/2"	1-G 1/2"	1
GRF-1-3/4"	1-G 3/4"	1-G 3/4"	1
GRF-1-1"	1-G 1"	1-G 1"	1

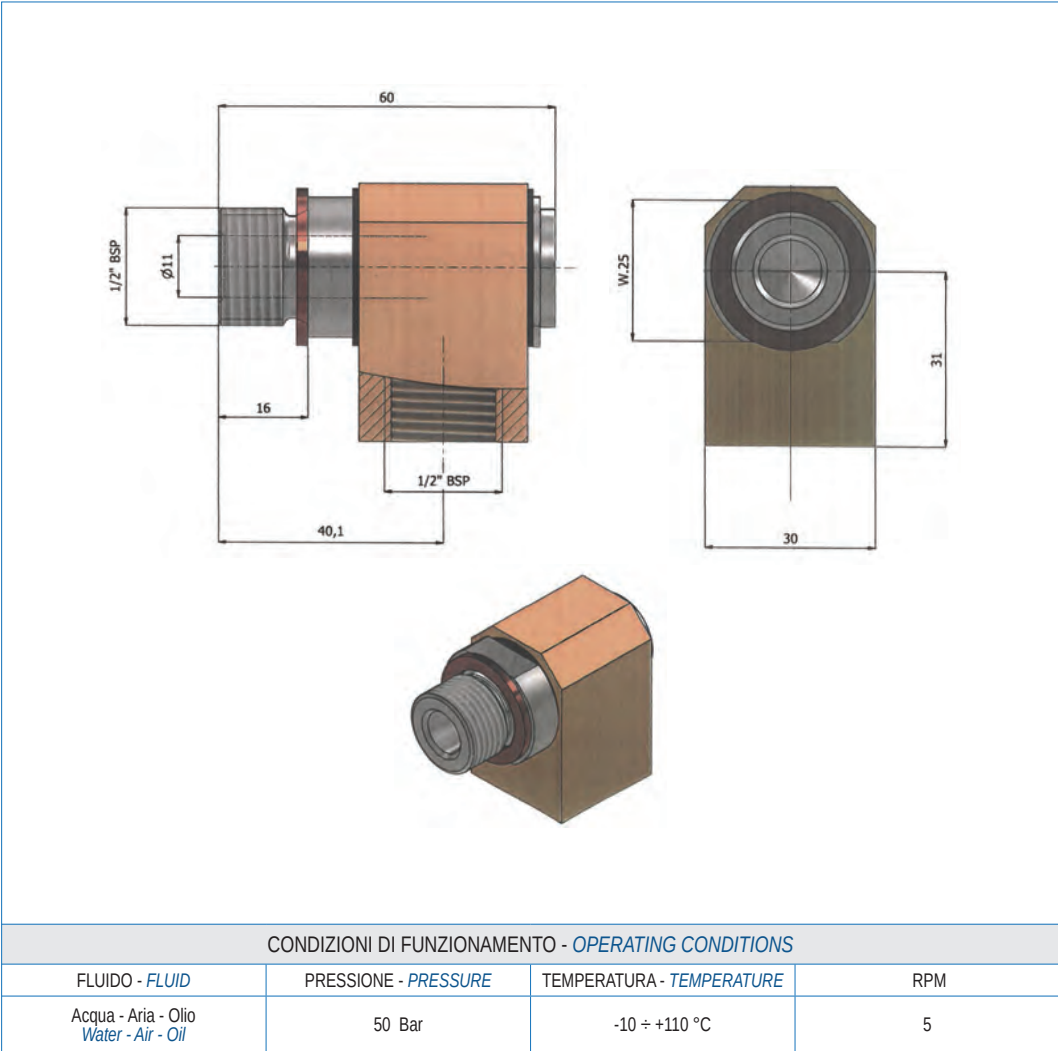


CONDIZIONI DI FUNZIONAMENTO - *OPERATING CONDITIONS*

FLUIDO - <i>FLUID</i>	PRESSIONE - <i>PRESSURE</i>	TEMPERATURA - <i>TEMPERATURE</i>	RPM
Acqua - Aria - Olio <i>Water - Air - Oil</i>	50 Bar	-10 ÷ +110 °C	5

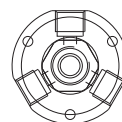


CONDIZIONI DI FUNZIONAMENTO - <i>OPERATING CONDITIONS</i>			
FLUIDO - <i>FLUID</i>	PRESSIONE - <i>PRESSURE</i>	TEMPERATURA - <i>TEMPERATURE</i>	RPM
Acqua - Aria - Olio <i>Water - Air - Oil</i>	50 Bar	-10 ÷ +110 °C	5

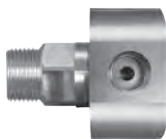


GIUNTO ROTANTE FEMMINA A TRE VIE - *THREE WAY FEMALE ROTARY JOINT*

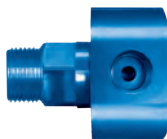
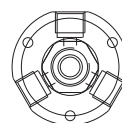
AISI 304

Vernice epossidica
Epoxy paint

COD	ENTRATA - <i>INLET</i>	USCITA - <i>OUTLET</i>	MOQ
GRF-3-1/4"	1-G 3/8"	3-G 1/4"	1

GIUNTO ROTANTE MASCHIO A TRE VIE - *THREE WAY MALE ROTARY JOINT*

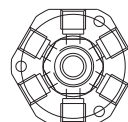
AISI 304

Vernice epossidica
Epoxy paint

COD	ENTRATA - <i>INLET</i>	USCITA - <i>OUTLET</i>	MOQ
GRF-3-1/4"	1-G 3/8"	3-G 1/4"	1

GIUNTO ROTANTE FEMMINA A SEI VIE - *SIX WAY FEMALE ROTARY JOINT*

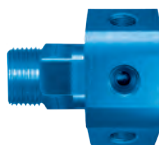
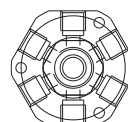
AISI 304

Vernice epossidica
Epoxy paint

COD	ENTRATA - <i>INLET</i>	USCITA - <i>OUTLET</i>	MOQ
GRF-6-1/8"	1-G 3/8"	6-G 1/8"	1

GIUNTO ROTANTE MASCHIO A SEI VIE - *SIX WAY MALE ROTARY JOINT*

AISI 304

Vernice epossidica
Epoxy paint

COD	ENTRATA - <i>INLET</i>	USCITA - <i>OUTLET</i>	MOQ
GRF-6-1/8"	1-G 3/8"	6-G 1/8"	1





evoluzione
della
specie

evolution
of the
species



Produzione Sinterizzati - Sintered Production

Via Matteotti, 1 - 40010 Sala Bolognese (BO)

Tel. +39 051 829 312

e-mail: sasbologna@sassinterizzati.com

Produzione Pneumatica - Pneumatic Production

Via Matteotti, 1 - 40010 Sala Bolognese (BO)

Tel. +39 0543 702 957

e-mail: sasforli@sassinterizzati.com

E.U.R.L. S.A.S. France

2 Impasse Prè Serpillon Zone Industrielle - 21210 Saulieu

Tel: +33 03 80 64 31 31

e-mail: info@sasfrance-sintering.com

www.sassinterizzati.com