

HEALTH & SAFETY

The Rotary Unions shown in this leaflet should not present any hazard when correctly fitted and used.

To ensure satisfactory performance, every Rotary Union is run-in and leakage tested before despatch.

It is essential to use the correct hand of rotary connection thread to ensure the Rotary Union will not unscrew (see the Installation Instructions). If a shaft reverses rotation then a flanged connection rather than a screw thread is strongly recommended.

At some time the seals in the Rotary Union will leak, so inspect regularly, also ensure that leakages are not hazardous to personnel and that the Rotary Union is removed for repair immediately. If leakages are not attended to promptly, bearing seizure may occur causing flexible hose failure and massive leakage. Fit protective guards if leakages are likely to be hazardous to personnel or equipment.

With oil systems minor leakages occur due to the natural characteristics of oil preventing seal faces from contacting fully.



WE MANUFACTURE MANY SPECIALS. IF YOU HAVE ANY DOUBT CONTACT US GIVING THE PART No. AND SERIAL No. FROM THE IDENTIFICATION LABEL FITTED.

FILTON ROTARY (P.B.) UNIONS

NOMINAL SIZES 15(1/2") to 20(3/4")

WORKING CONDITIONS

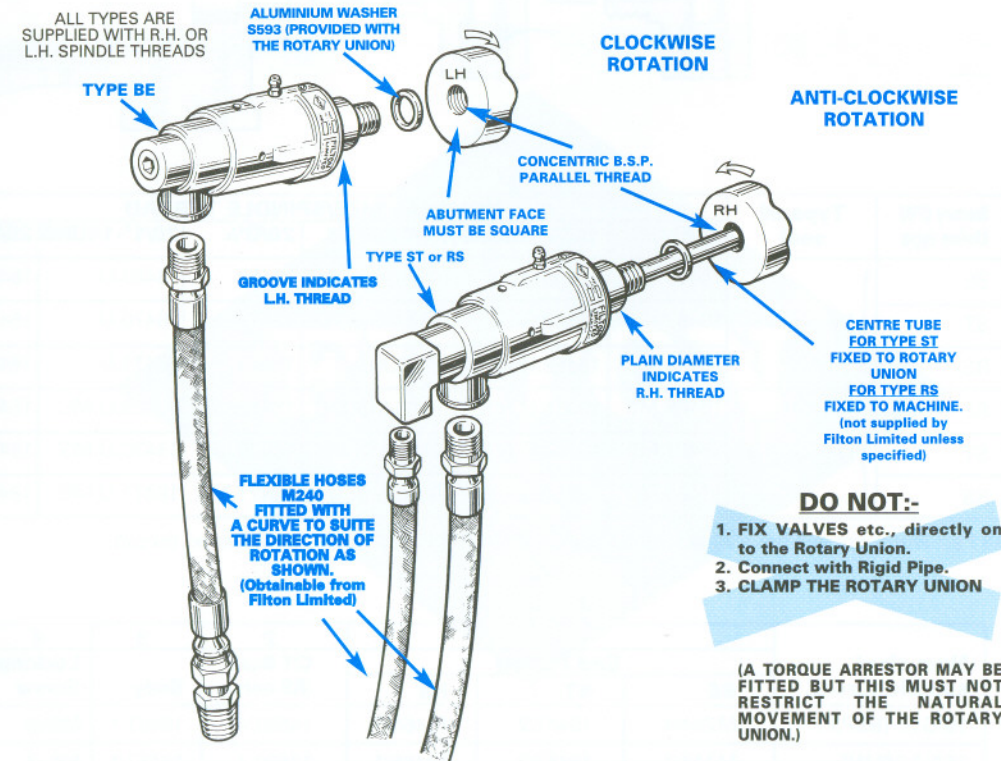
(Maximum)

- Safety** - see back page
- Fluids** - Abrasive free-air (not dry), oil, steam and water
- Pressure** - 17 bar **Vacuum** - 740 mm Hg
- Temperature** - 160°C
- Speed** - 1000 r.p.m. when the Bellows seal is fitted
- 1500 r.p.m. when the Mechanical seal is fitted

DO NOT EXCEED OR COMBINE MAXIMUMS - IF IN DOUBT ASK. ALL OF THESE PRODUCTS HAVE BEEN LEAKAGE TESTED - DISMANTLING INVALIDATES THE WARRANTY.

INSTALLATION

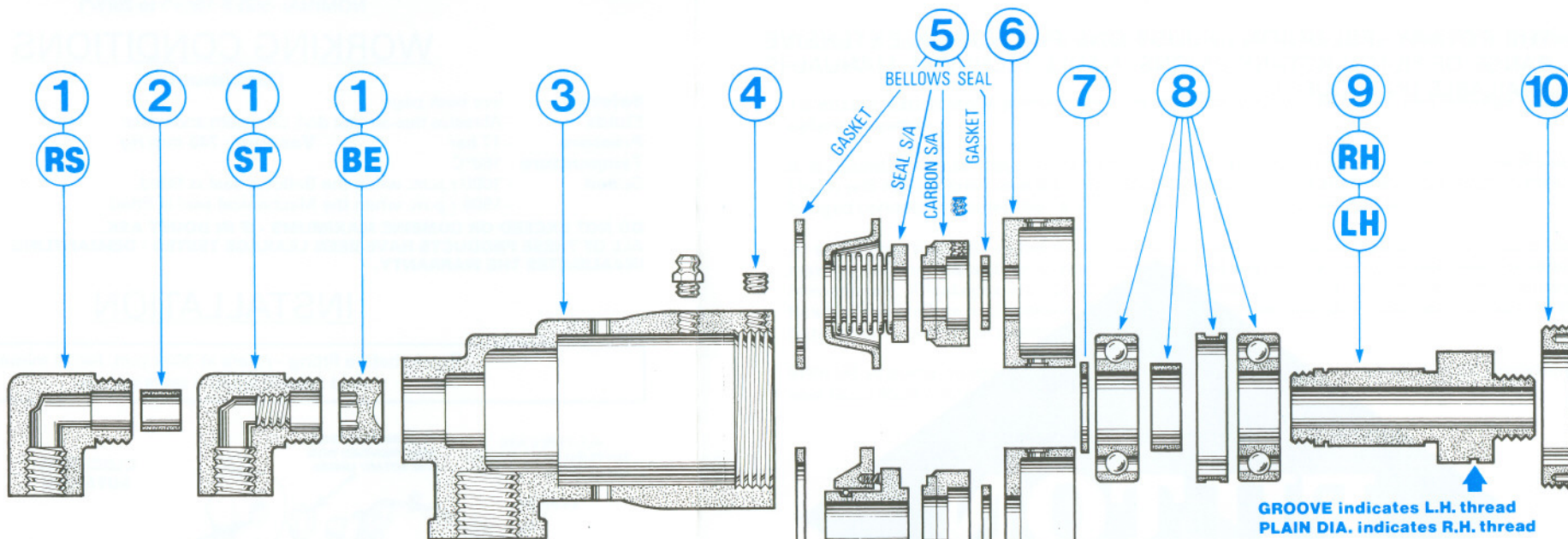
Run in before fitting - rotate at 300 r.p.m. for 15 minutes
Add system liquid if seals squeak.



MINIMUM LENGTHS FOR FLEXIBLE HOSE

Nom size	8(1/4")	15(1/2")	20(3/4")
Length mm	150	305	305
FILTON HOSE	M.240/1	M.240/3	M.204/4

SPARE PARTS FOR ROTARY (P.B.) UNIONS



Rotary (PB) Union type	Type of seal	NOMINAL SIZE/SPINDLE THREAD					
		15/G ¹ / ₂ "	15/P ¹ / ₄ "-16UNF	15/M22x1.5	20/G ³ / ₄ "	20/1" - 14UNS	20/M30x1.5
BE	Bellows	18466	18466.U	18466.MB	18469	18469.U	18469.MB
ST		18467	18467.U	18467.MB	18470	18470.U	18470.MB
RS		18468	18468.U	18468.MB	18471	18471.U	18471.MB
BE	Mechanical	18466.MS	18466.U.MS	18466.MB.MS	18469.MS	18469.U.MS	18469.MB.MS
ST		18467.MS	18467.U.MS	18467.MB.MS	18470.MS	18470.U.MS	18470.MB.MS
RS		18468.MS	18468.U.MS	18468.MB.MS	18471.MS	18471.U.MS	18471.MB.MS

All Part Numbers will have an additional suffix -R for righthand and -L for lefthand thread

1. CHECK THE LABEL FOR PART NO.
2. IDENTIFY THE SIZE AND TYPE FROM THE TABLE.
3. REFER TO PARTS LISTED UNDER NOMINAL SIZE AND SPINDLE THREAD.

Nom.size/ spindle thread	1 End Fitting			2 C/T Bush (RS only)	3 Body	4 Locking Screw	5 Seal Kit		6 Spacer		7 Circlip	8 Bearing Kit	9 Spindle	10 Locking Ring	Nom.size/ spindle thread
	BE	ST	RS				Bellows	Mechanical	B.Seal	M.Seal					
15/G ¹ / ₂ " (BSP.P)	M244/4	18467/2	18468/1	14699/4	18467/1	M6x6	S1100/2	S1400/2	18467/3	15166/6A	M184/3	S1234/2	14535/1	18470/3	15/G ¹ / ₂ " (BSP.P)
15/P ¹ / ₄ "-16UNF	M244/4	18467/2	18468/1	14699/4	18467/1	M6x6	S1100/2	S1400/2	18467/3	15166/6A	M184/3	S1234/2	14535.U/1	18470/3	15/P ¹ / ₄ "-16UNF
15/M22x1.5	M244/4	18467/2	18468/1	14699/4	18467/1	M6x6	S1100/2	S1400/2	18467/3	15166/6A	M184/3	S1234/2	14535.M/1	18470/3	15/M22x1.5
20/G ³ / ₄ " (BSP.P)	M244/4	18470/2	18471/1	14543/1	18470/1	M6x6	S1100/2	S1400/2	18467/3	15166/6A	M184/3	S1234/2	14534/2	18470/3	20/G ³ / ₄ " (BSP.P)
20/1" - 14 UNS	M244/4	18470/2	18471/1	14543/1	18470/1	M6x6	S1100/2	S1400/2	18467/3	15166/6A	M184/3	S1234/2	14534.U/2	18470/3	20/1" - 14 UNS
20/M30x1.5	M244/4	18470/2	18471/1	14543/1	18470/1	M6x6	S1100/2	S1400/2	18467/3	15166/6A	M184/3	S1234/2	14534.M/2	18470/3	20/M30x1.5

SUPPLEMENT TO SPARE PARTS LIST FOR ROTARY (PB) UNIONS.

Rotary (PB) Union type	Type of seal	NOMINAL SIZE/SPINDLE THREAD		
		25/G.1"	25/1½"-12UNF	25/M35x1.5
Pour	Type	DIAMETRE NOMINAL DE L'ARBE		
Raccords PB	d'etanchéité	25/G.1"	25/1½"-12UNF	25/M35x1.5
Roto-Speisekopf	Art der	NENNGRÖÙE / WELLENANSCHLUÙGEWINDE		
Bauart PB Typ	Dichtung	25/G.1"	25/1½"-12UNF	25/M35x1.5
Giunto rot	Tipo di	DIMENSIONE/FILETTO ROTORE		
P.B. tipo	tenuta	25/G.1"	25/1½"-12UNF	25/M35x1.5
BE	Bellows Soufflet Metallbalg a Soffietto	18472	18472.U	18472.MB
ST		18473	18473.U	18473.MB
RS		18474	18474.U	18474.MB
BE	Mechanical Mechanique Mechanisch Meccaniche	18472.MS	18472.U.MS	18472.MB.MS
ST		18473.MS	18473.U.MS	18473.MB.MS
RS		18474.MS	18474.U.MS	18474.MB.MS

All Part Numbers will have an additional suffix -R for righthand thread and -L for Lefthand thread

A la référence, ajouter "-R" pour filetage à droite, "-L" pour filetage à gauche

Alle Artikel-Nr.bekommen einen Zusatz - R Für Rechts und L Für Linksgewinde

I particolari avranno un suffisso R per filetto destro e L per sinistro

Nom.size/ spindle thread	1 End Fitting			2 C/T Bush (RS only)	3 Body	4 Locking Screw	5 Seal Kit		6 Spacer		7 Circlip	8 Bearing Kit	9 Spindle	10 Locking Ring	Nom.size/ spindle thread
	BE	ST	RS				Bellows	Mechanical	B.Seal	M.Seal					
Diametre	1			2	3	4	5		6		7	8	9	10	Diametre
Nominal Type	Embout			Palier Graphite (RS, Seulement)	Corps	Vis Pointeau	Pochette d'Etanchéité		Entretoise		Circlip	Pochette Roulements	Arbre	Bague D'Arret	Nominal Type de Filetage
DE Filetage	BE	ST	RS				Soufflet	Mecanique	Soufflet	Mecanique					
Nenngröße/ Wellenanschluß- gewinde	1 Winkel			Innenrohrlager, nur bei RS	Gehäuse	Gewinde stift	Dichtungssatz		Festring		Sicherungs- ring	Lagersatz	Hohlwelle	Gewinde ring	Nenngröße/ Wellenanschluß- gewinde
	BE	ST	RS				metallbalg	mechanisch	metallbalg	mechanisch					
Dimensione/ filetto rotore	1 Adattore			B/G solo per g.ti RS	Corpo	Vite	kit di tenute		spaziatore di tenute		Anello elastico	Assieme cuscinetti	Alberino	Anello di bloccaggio	Dimensione/ filetto rotore
	BE	ST	RS				a soffietto	meccaniche	a soffietto	meccaniche					
25/G1"(BSP.P)	M244/5	18473/2	18474/1	14502/3	18473/1	M6x5	S1100/3	S1400/3	18473/4	15355/5A	M.184/15	S1234/3	18473/5	18473/3	25/G1"(BSP.P)
25/1½"-12UNF	M244/5	18473/2	18474/1	14502/3	18473/1	M6x5	S1100/3	S1400/3	18473/4	15355/5A	M.184/15	S1234/3	18473.U/5	18473/3	25/1½"-12UNF
25/M35x1.5	M244/5	18473/2	18474/1	14502/3	18473/1	M6x5	S1100/3	S1400/3	18473/4	15355/5A	M.184/15	S1234/3	18473.M/5	18473/3	25/M35x1.5

OVERHAUL

- a. Remove Locking Screw 4 which allows the removal of Locking Ring 10.
- b. Remove Spindle 9 complete with Bearing Kit 8, Circlip 7 and Carbon sub assembly of Seal Kit 5.
- c. Remove Spacer 6 and Seal sub assembly and Gasket of Seal Kit 5 from the Body 3.
- d. If type RS, unscrew End Fitting 1.RS from the body, remove and replace C/T Bush 2.
- e. Hold spindle 9 in a vice, remove locking screws to enable Carbon sub assembly of Seal Kit 5 to be unscrewed, then remove gasket.
- f. Remove Circlip 7 and press off Bearing Kit 8 from Spindle 9.
- g. Discard and replace Seal Kit 5 and Bearing Kit 8. (Handle Seal Kits very carefully to avoid damaging the precision lapped seal faces).
- h. Thoroughly clean all parts before re-assembly which is virtually the reverse of the above.
- i. After re-assembly, run-in as indicated in the installation instructions and test to ensure the seals are working correctly before re-fitting to the machine.

MAINTENANCE

The Filton Bellows Seal or Mechanical seal fitted to the **Rotary (PB) Union** is self-adjusting within its working life. The ball bearings fitted need occasional greasing. Generally once per shift on 'hot' applications and once per month on 'cold' applications is suitable. **For specific recommendations we suggest you contact the grease manufacturer.**

Before despatch we lubricate the bearings with a Bentone base grease, ensure your lubricant is compatible with this.

RECOMMENDED LUBRICANTS

KLÜBER

Centoplex 2EP	- 20°/+130°C
Petamo GHY443	- 25°/+180°C

BARDAHL

Multipurpose Grease No 2	- 20°/+160°C
Haute Temperature	- 10°/+180°C

BP

Energrease LS2	- 30°/+130°C
Energrease HTG2	- 20°/+180°C

BURMAH-CASTROL

Spheerol MP3	- 20°/+110°C
Spheerol B2	- 25°/+180°C

CALTEX

Regal Starfak Premium 2	- 40°/+120°C
Thermatex EP	- 20°/+180°C

DOW CORNING LTD

Molykote 44M	- 40°/+180°C
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ELF OIL

Multi 2	- 25°/+130°C
Staterma GB3	- 10°/+180°C

ESSO

Beacon 2	- 25°/+125°C
IL 2880	- 20°/+180°C

MOBIL

Mobilplex 47	- 25°/+150°C
Mobiltemp 1	+ 10°/+180°C

ROCOL

Sapphire 2	- 30°/+150°C
Sapphire Hi-Temp 2	- 40°/+180°C

SHELL

Alvania EP LF2	- 20°/+120°C
Darina Grease R2	+ 10°/+190°C

TEXACO

Multifak AFB2	- 40°/+120°C
Starfak Ultratem 2	- 40°/+175°C

NOTE:

For sub-zero temperatures check with our Technical Department that the Rotary Union you are considering is acceptable for the temperature and fluid.