

RHP FITTING

BOISWOOD

GAS AND LIQUID CONTROL TECHNOLOGIES

Pressure & Vacuum

Flow

Level & Temperature

Tube & Fittings

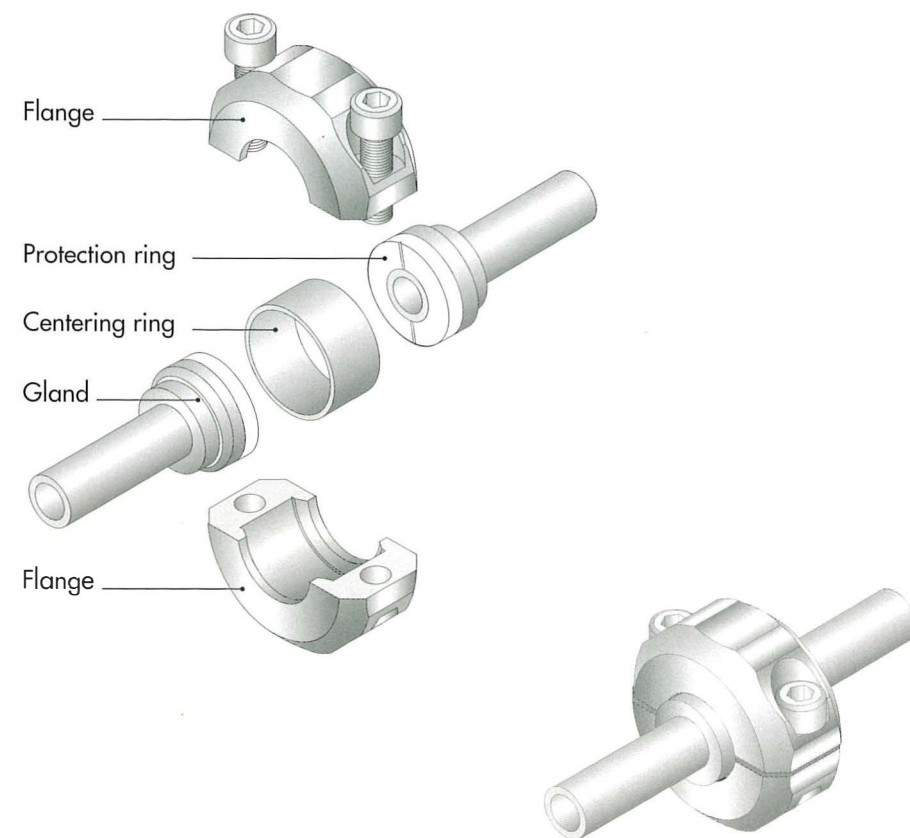
HVACR

Custom Services



F L O W M E C A™

PRESENTATION



RHP ADVANTAGES

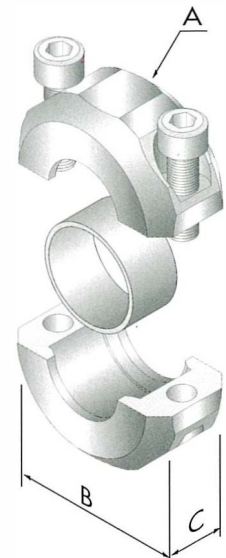
- Optimal conduit **continuity**.
- **No dead volume**.
- **Metal-to-metal sealing** (only on joining plane).
- Excellent performance at **high pressure**.
- No metal-to-metal rubbing on assembly.
- Multiple assembly and disassembly **without loss of efficiency**.
- **Axial tightening** (no twisting of the tubes).
- **Reduced foot print**.
- **No gasket**.
- **No male and female** end fittings.
- **Easy assembly and disassembly** (3 or 4 mm CHC key).
- **Accurate alignment** of the end fittings by centering ring.
- **Greatly reduced** gas panel design time.

The high quality connector

FLANGES

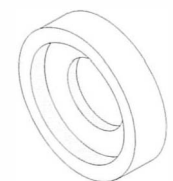
Tubing size		Reference	P/N	A	B	C
Inch	mm					
1/8"	4	COQ184	100058	Ø 15.8	no flat part	7.00
1/4", 3/8"	6, 8, 10	COQ610	100059	Ø 25.4	24.50	12.00
1/2"	12, 14	COQ1214	100060	Ø 32.8	31.00	12.00

These part numbers are a kit, containing:
the two half flanges, a centering ring and screws



PTFE PROTECTION RINGS

Dia	Reference	P/N
1/8	COUP1/8	100427
1/4	COUP1/4	100065
3/8	COUP3/8	100066
1/2	COUP1/2	100067



SCREWS

Dia	Reference	P/N
1/8	VIS184	100428
1/4	VIS610	100358
3/8	VIS610	100358
1/2	VIS1214	100359



GLANDS

Dia	Reference	P/N	A	B
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Shorts

1/8	HI1/8SG	100325	8.05	12.70
1/4	HI1/4SG	100070	6.35	13.35
3/8	HI3/8SG	100078	6.35	13.35
1/2	HI1/2SG	100342	6.35	13.35
1/4	HI1/4SCG	100072	6.35	13.35
3/8	HI3/8SCG	100080	6.35	13.35

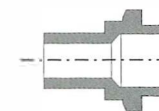
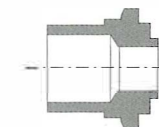
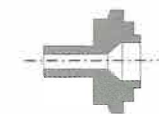
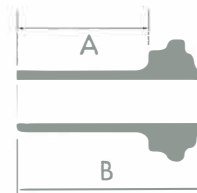
Longs

1/4	HI1/4G	100074	19.05	26.05
3/8	HI3/8G	100082	19.05	26.05
1/2	HI1/2G	100336	19.05	26.05
1/4	HI1/4CG	100076	19.05	26.05
3/8	HI3/8CG	100084	19.05	26.05

REDUCING GLANDS

Tube	RHP	Reference	P/N
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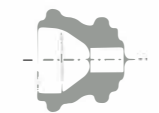
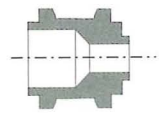
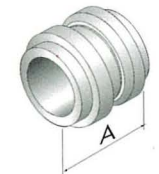
1/8	1/4	HRIS1/8R1/4G	100421
3/8	1/4	HRIS3/8R1/4G	100142
1/4	3/8	HRIS1/4R3/8G	100150



REDUCING UNIONS

RHP	RHP	Reference	P/N	A
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3/8	1/4	HRIR3/8R1/4G	100158	15
1/2	3/8	HRIR1/2R3/8G	100360	17
1/2	1/4	HRIR1/2R1/4G	100362	17



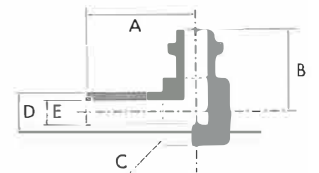
ELBOWS

Dia	Reference	P/N	A	B	C	D	E
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1/8	HL1/8RG	100494	12.70	7.93			
1/4	HL1/4RG	100098	18.00	13.00			
3/8	HL3/8RG	100108	18.00	13.00			
1/2	HL1/2RG	100346	22.00	19.00			

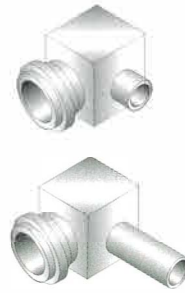
1/4	HL1/4SG	100100	12.85	18.00	13.00	6.35	4.57
3/8	HL3/8SG	100110	12.85	18.00	13.00	9.52	7.62

1/4	HL1/4G	100104	25.55	18.00	13.00	6.35	4.57
3/8	HL3/8G	100114	25.55	18.00	13.00	9.52	7.62



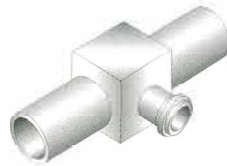
REDUCING ELBOWS

Tube	RHP	Reference	P/N	A	B	C	D	E
3/8	1/4	HRLR1/4S3/8G	100419	12.85	18.00	13.00	9.52	7.62
3/8	1/4	HRLR1/4T3/8G	100162	25.55	18.00	13.00	9.52	7.62



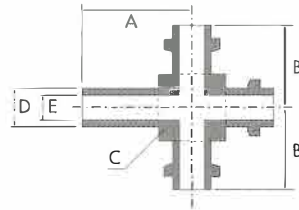
REDUCING TEES

Tube	RHP	Reference	P/N	A	B	C	D	E
3/8	1/4	HRTT3/4R1/4G	100170	25.55	18.00	13.00	9.52	7.62



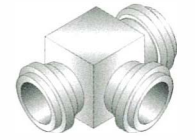
CROSSES

Dia	Reference	P/N	A	B	C	D	E
1/4	HX1/4RG	100222		18.00	13.00		
3/8	HX3/8RG	100226		18.00	13.00		
1/4	HX1/4RRRSRG	100224	12.85	18.00	13.00	6.35	4.57
1/4	HX1/4RRRTG	100415	25.55	18.00	13.00	6.35	4.57

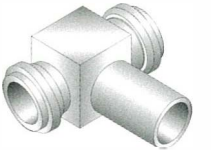


TEES

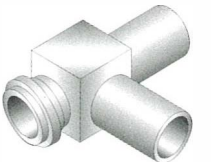
Dia	Reference	P/N	A	B	C	D	E
1/8	HT1/8RG	100493		12.70	7.93		
1/4	HT1/4RG	100178		18.00	13.00		
3/8	HT3/8RG	100198		18.00	13.00		
1/2	HT1/2RG	100348		22.00	19.00		



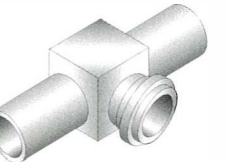
1/4	HT1/4RRTG	100180	25.55	18.00	13.00	6.35	4.57
3/8	HT3/8RRTG	100200	25.55	18.00	13.00	9.52	7.62



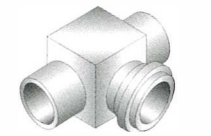
1/4	HT1/4RTTG	100184	25.55	18.00	13.00	6.35	4.57
3/8	HT3/8RTTG	100204	25.55	18.00	13.00	9.52	7.62



1/4	HT1/4TTRG	100186	25.55	18.00	13.00	6.35	4.57
3/8	HT3/8TTRG	100206	25.55	18.00	13.00	9.52	7.62



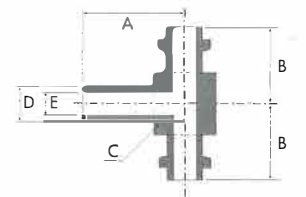
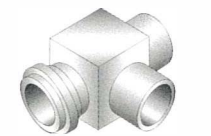
1/4	HT1/4SSRG	100190	12.85	18.00	13.00	6.35	4.57
3/8	HT3/8SSRG	100210	12.85	18.00	13.00	9.52	7.62



1/4	HT1/4RRSG	100194	12.85	18.00	13.00	6.35	4.57
3/8	HT3/8RRSG	100214	12.85	18.00	13.00	9.52	7.62



1/4	HT1/4RSSG	100196	12.85	18.00	13.00	6.35	4.57
3/8	HT3/8RSSG	100216	12.85	18.00	13.00	9.52	7.62



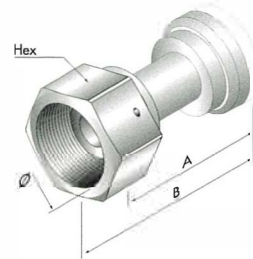
JCR MALE - RHP ADAPTATORS

Dia	Reference	P/N	A	Hex	Ø
1/4	HJM1/4G	100094	30.30	17	9/16-18 UNF
3/8	HJM3/8G	100096	34.10	24	7/8-14 UNF



JCR FEMALE - RHP ADAPTATORS

Dia	Reference	P/N	A	B	Hex	Ø
1/4	HJF1/4G	100090	30.30	43.14	17	9/16-18 UNF
3/8	HJF3/8G	100092	34.10	48.35	24	7/8-14 UNF



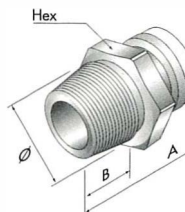
DOUBLE RING - RHP ADAPTATORS

Dia	Reference	P/N	A	Hex
1/4	HSW1/4G	100174	24.00	14
3/8	HSW3/8G	100176	25.80	17



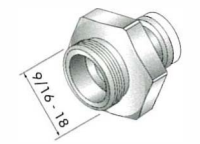
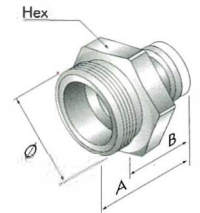
NPT - RHP ADAPTATORS

Dia	Reference	P/N	A	B	Hex	Ø
1/4	H1/4NPTG	100134	27	12	17	1/4 NPT



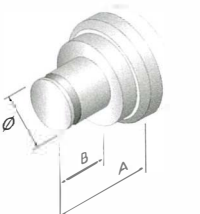
MASS FLOW - RHP ADAPTATORS

Dia	Reference	P/N without filter	P/N with filter	A	B	Hex	Ø
1/4	HM1/4AG	100122	100330	25	17.3	24	7/8 - 14 UNF
3/8	HM3/8AG	100124	100331	25	17.3	24	7/8 - 14 UNF
1/4	HM1/4BG	100126	100501	29	19	24	9/16 - 18 UNF
3/8	HM3/8BG	100128	100502	29	19	24	9/16 - 18 UNF
1/4	HM1/4CG	100130	100503	29	19	24	7/16 - 20 UNF
3/8	HM3/8CG	100132	100504	29	19	24	7/16 - 20 UNF



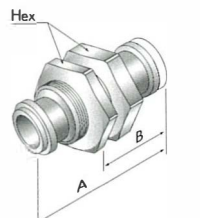
CAPS

Dia	Reference	P/N	A	B	C
1/8	HB1/8R	100734	8	5	4.30
1/4	HB1/4R	100054	14	7	6.35
3/8	HB3/8R	100055	14	7	9.52
1/2	HB1/2R	100056	15	7	12.70



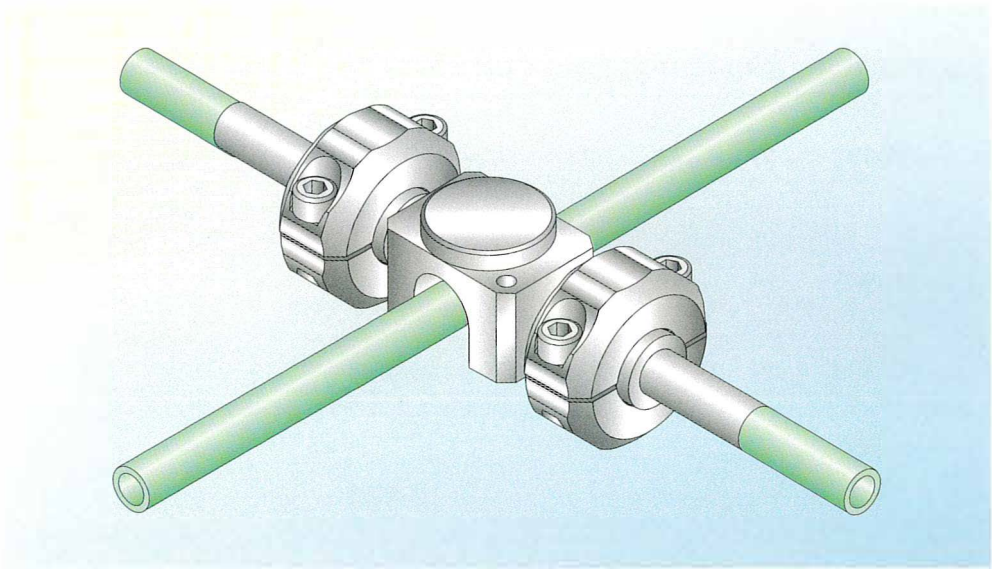
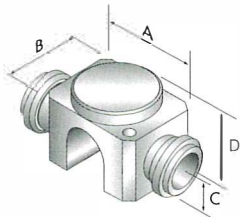
BULKHEAD UNIONS

Dia	Reference	P/N	A	B	Hex	Filetage
1/4	HPC1/4RG	100138	36	20.5	24	M16
3/8	HPC3/8RG	100140	36	20.5	24	M16



BRIDGES

Dia	Reference	P/N	A	B	C	D
1/4	HPT1/4G	100366	34	16	7	17
3/8	HPT3/8G	100368	46	24	7	21



Allows to cross two tubes situated at the same level.

All dimensions are expressed in millimeters.
Dimensions are for reference only, and are subject to change without notice.
All RHP end connectors are supplied with PTFE protection rings.

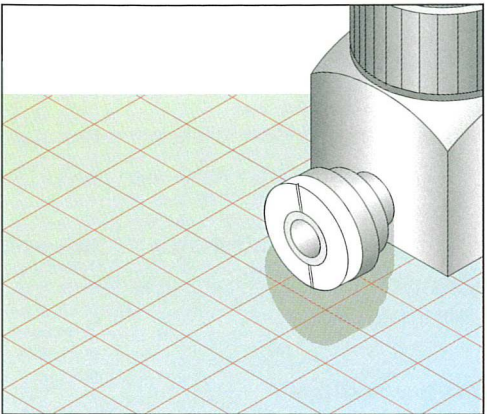
INSTRUCTION FOR FITTING RHP CONNECTORS

IMPORTANT The same flange reference is used for multiple tubing sizes (For example : COQ610 —> 1/4", 3/8", 6mm, 8mm, 10mm), care should be taken to assemble only connectors and components (valves, filter...) having the same diameter.

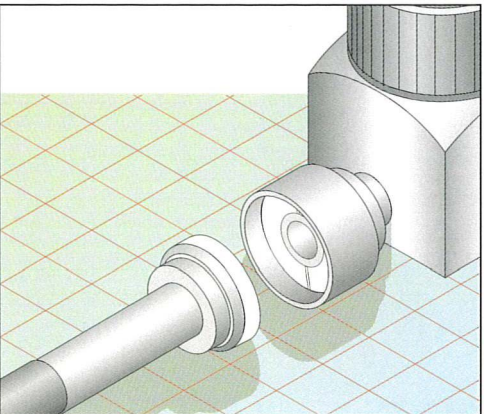
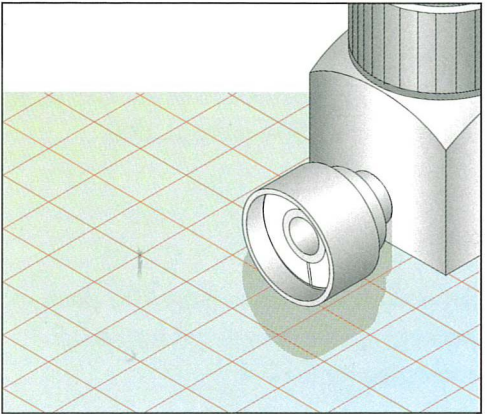
ASSEMBLY TIPS

It is recommended to connect the various components such as valves, filters, MFC etc. and to fix to the panel only those elements having a considerable mass or those that are subjected to vibration. Reverse the procedure for dismantling.

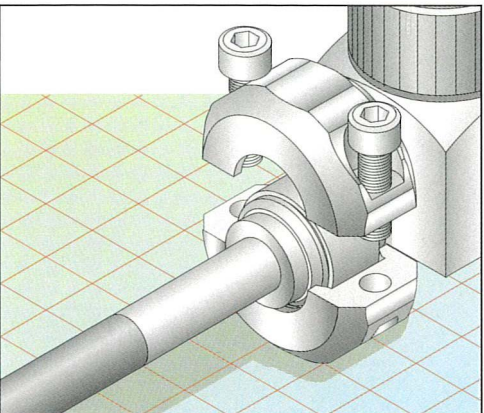
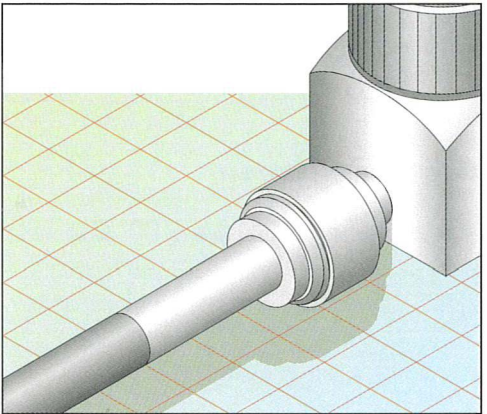
ASSEMBLY



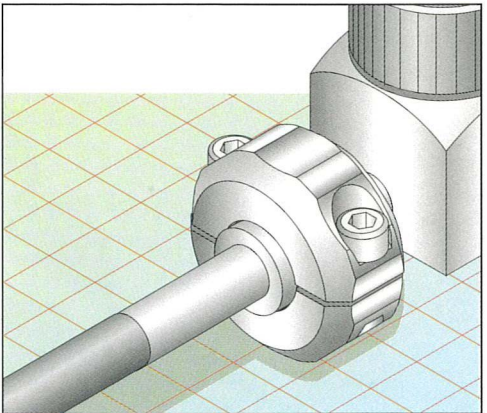
Slide the centering ring on one of the connector heads.



Position the RHP connector face to face and slide the centering ring to overlap equally both heads.



Fit the flanges around the connector sleeve assembly and maintain them in position.
Insert the key and tighten the screws alternatively with the required key providing an equal gap on both sides.



TECHNICAL SPECIFICATIONS

Materials:

316 L stainless steel.
Electro polishing and passivation of the fluid path.
Screws in silver-plated 304 stainless steel.
Protection rings in PTFE.

Packaging:

Assembled and conditioned in class 100 clean room.
Double packaging with neutral gas for Ra 0.2.
Simple packaging for Ra 0.4.

RHP SPECIFICATION

Leak rate:

$< 1.10 \cdot 10^{-10} \text{ Atm.cm}^3 / \text{s Helium}$

Operating temperatures:

Sealing-tightness maintained from -100°C to $+500^\circ \text{C}$.

From -100°C to $+230^\circ \text{C}$ with PTFE protection rings.
Up to $+550^\circ \text{C}$ with specific protection rings.

Identification and traceability:

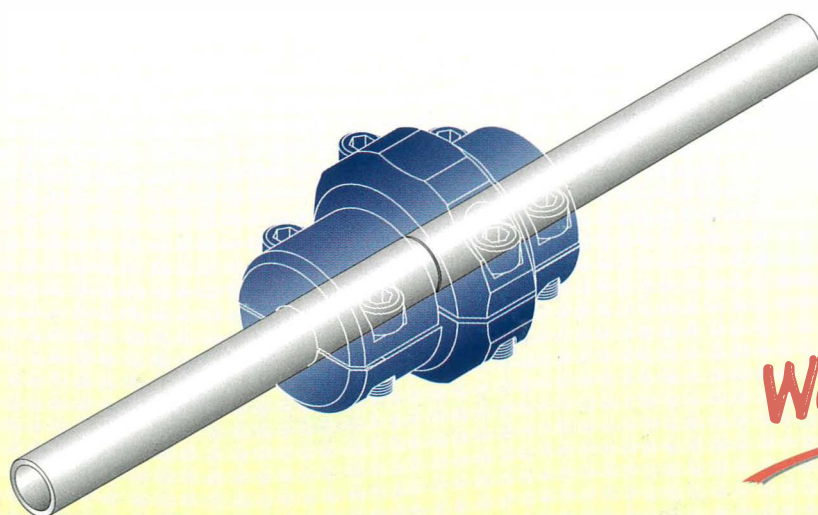
In certain instances identification and traceability may be required.
The goal of identification is to determine the origin of the material of each component and quality control at key manufacturing stages.
Traceability is assured by material lot number tracking.
Identification and traceability are provided only on prior request of the customer.

RHP fitting welding:

The RHP fittings are conceived for use with automatic or manual welding equipment.
Prior to welding, remove the PTFE protection ring. Refit to maintain sealing face protection.

In this catalog only the diameters 1/8, 1/4, 3/8 and 1/2 are indicated in Ra 0.2. For other materials, or surface quality, please contact Flowmecca.

RHP CLICK PIPE



NEW
Weld-Free