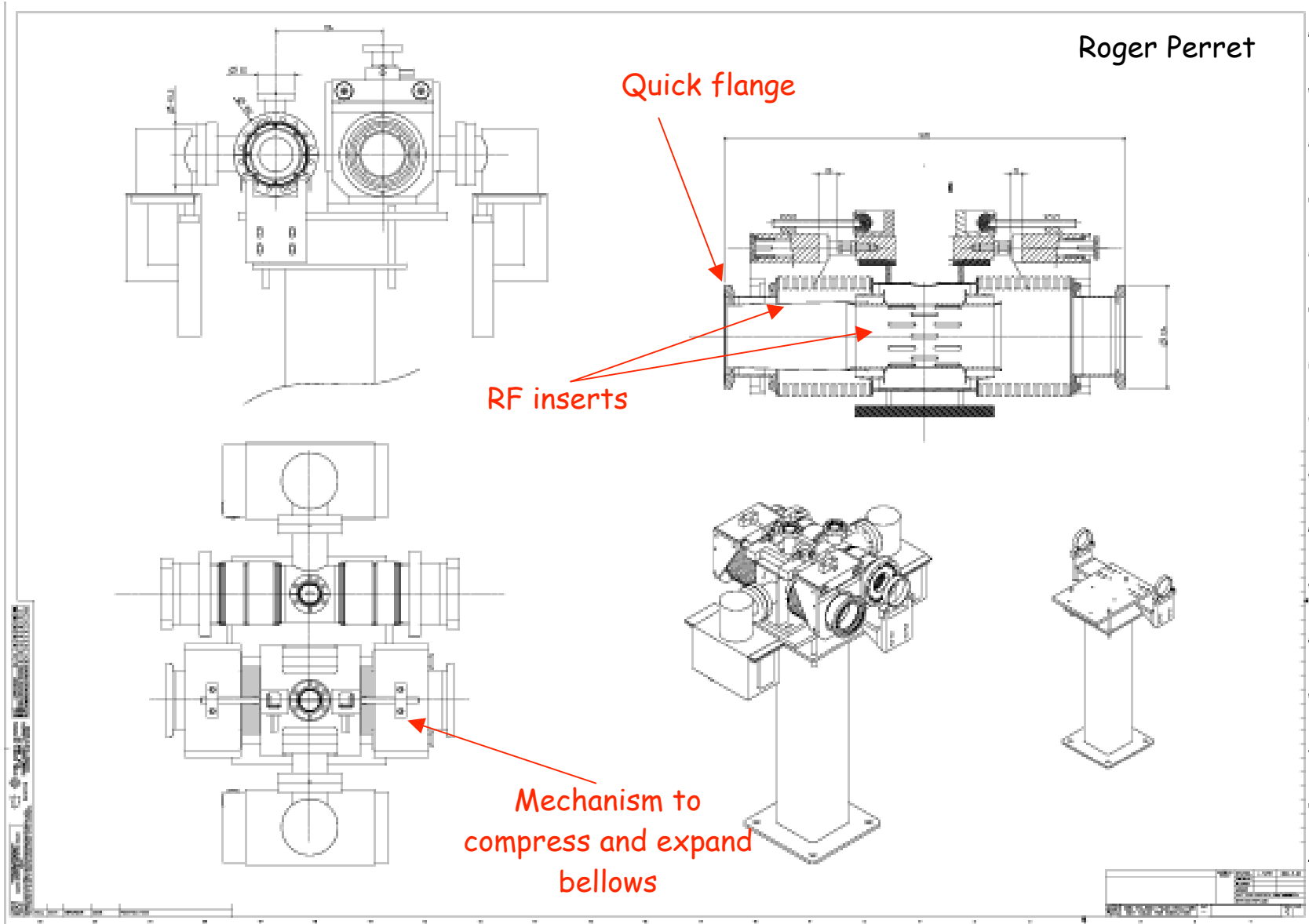
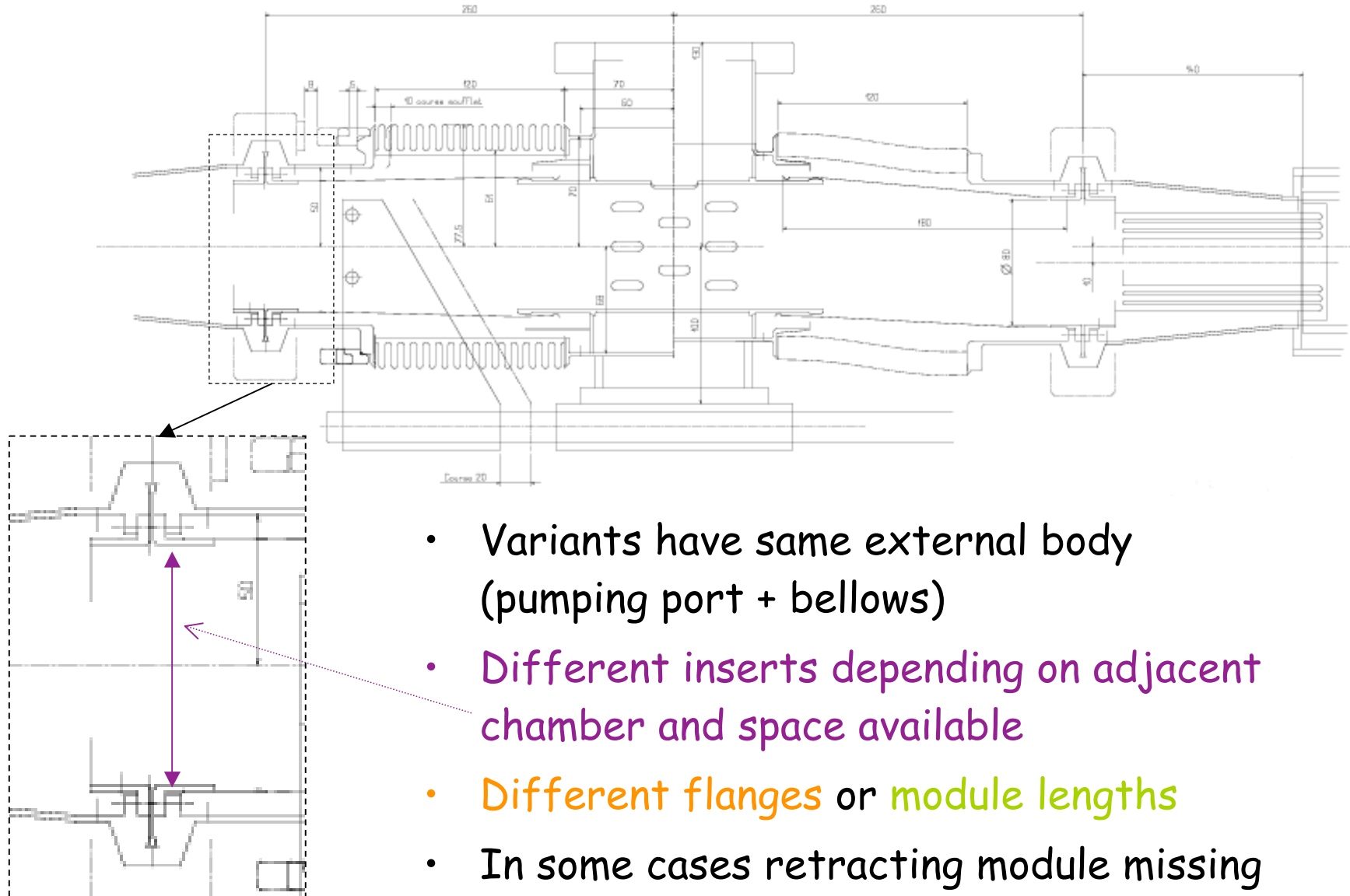


Pumping Modules

Roger Perret

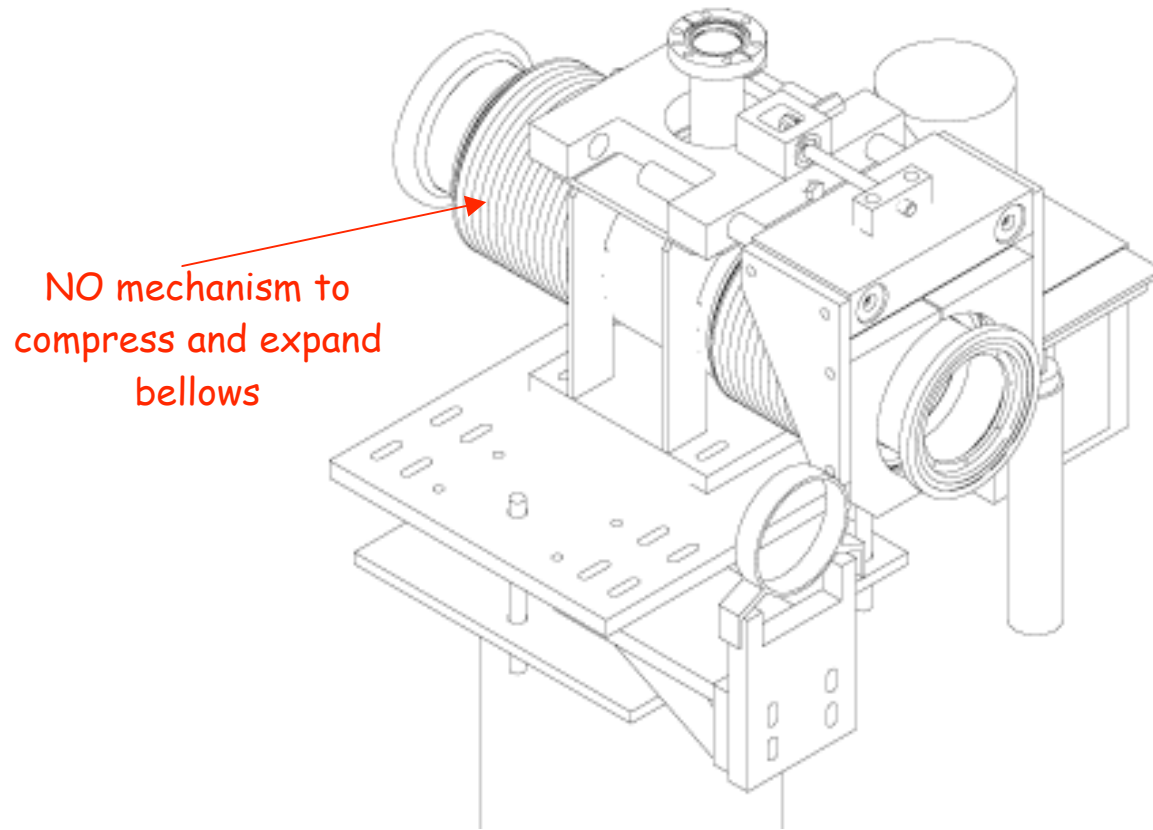


RF inserts



- Variants have same external body (pumping port + bellows)
- Different inserts depending on adjacent chamber and space available
- Different flanges or module lengths
- In some cases retracting module missing

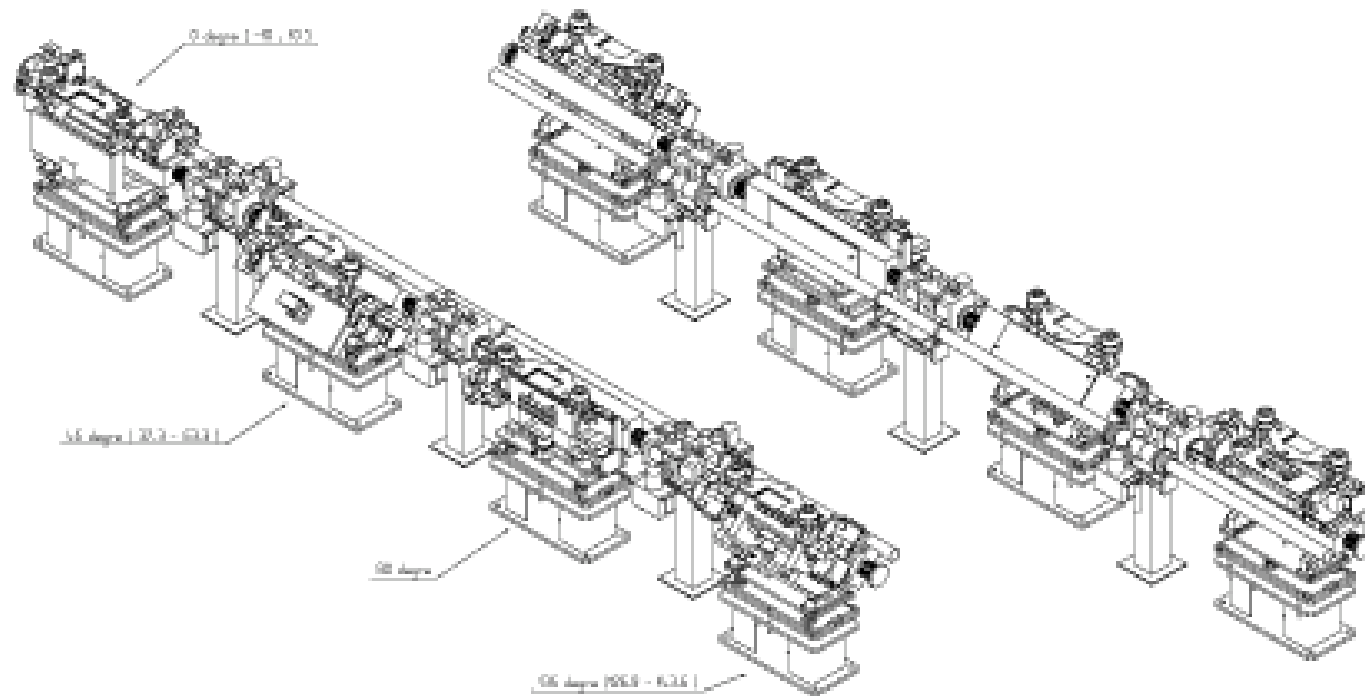
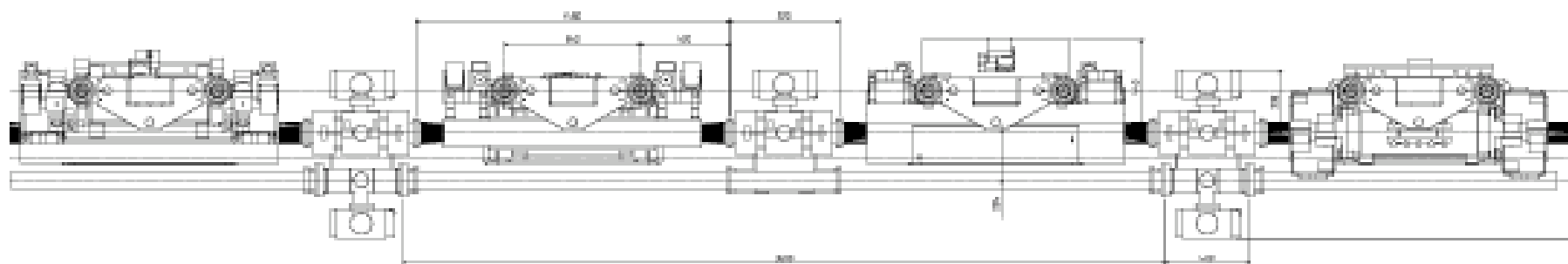
Module type VMTIB



List of collimator pumping modules

- ❑ **VMTIA:** QCF100/QCF100 - 80/80
- ❑ **VMTIB:** QCF100/QCF100 - 80/80
 - one clamp chain installed by hand
- ❑ **VMTNA:** QCF100/DN100 - 80/63
- ❑ **VMTQA:** QCF100/QCF100 - 80/80 - short
 - one clamp chain installed by hand
- ❑ **VMTQH:** QCF100/QCF100 - elliptic horizontal 80/52H30V
 - one clamp chain installed by hand
- ❑ **VMTNV:** QCF100/DN100 - elliptic vertical 80/52V30H
- ❑ **VMTQV:** QCF100/QCF100 - elliptic vertical 80/52V30H
 - one clamp chain installed by hand
- ❑ **VMTSA:** QCF150/QCF150 - 130/130

Eq.- Code	Flange A	Diameter	Flange B	Diameter	length	Phase		IR1	IR2	IR3	IR4	IR5	IR6	IR7	IR8
	Type		Type												
						ph1	58			11				47	
VMTIA	QCF	80	QCF	80	520	ph4	10							10	
						TCLA	32			12				20	
VMTIB	QCF	80	QCF	80	520	ph1	30	4	4	8		4		6	4
						ph2	14			4				10	
						ph3	4	2				2			
						ph4	8							8	
						ph1	4		2						2
VMTNA	QCF	80	NCF	63	520	ph3	4	2				2			
						TCLA	1			1					
VMTQA	QCF	80	QCF	80	440	ph1	5			1				4	
						ph2	6							6	
						ph4	6							6	
						ph1	1							1	
VMTQH	QCF	80	QCF	52H/30V	520	ph2	1							1	
						ph1	2			2					
VMTNV	QCF	80	NCF	52V/30H	520	ph2	2			2					
						ph1	1			1					
VMTQV	QCF	80	QCF	52V/30H	520	ph2	2			2					
VMTSA	QCF	130?	QCF	130?		ph1	10		5						5
						TCLA	33			13				20	
	I	Intermodule			H	horizontal	ph1	111	4	11	23		4	58	11
	C	circular			V	vertical	ph2	25			8			17	
	NCF	N Conflat			S	special	ph3	8	4			4			
	QCF	Quick-connect Conflat				module	ph4	24						24	
							tot	201	8	11	44		8	119	11
							ph1+ph2	169	4	11	44		4	95	11



LHC Collimators

R. Parnet

TOMCOSA.PL

Status

- Pumping Modules:
 - Market Survey ready to go out (comments for purchasing to be included!).
 - Phase 1 and 2 included, phase 3 and 4 options.
Supply to be completed by June 2006.
 - 2500-3000CHF per unit estimated.
- Bellows: Call for Tender through approval process.
- RF contacts prototype will be produced and tested shortly (few weeks).