

Type B Prototype Cable List

Note: This initial version covers only from the in-vacuum component, through the feedthrough to the rack.

Key lengths - very rough estimate including spare for draping (m)

BF to SF:	1
SF to F0:	1.5
F0 to feedthrough:	2
BF to feedthrough:	4.5
SF to feedthrough:	3.5
PI to feedthrough	2

Level	Chan	Cable Name	Type	"A" End	Need	"B" End	Need	Cable	Need (Pre-Made)	Need (RJ22 Ribbon)	Need (RJ22 Cable)	Special?
TM	H1	C-TM-H1-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5		
TM	H1	F-TM-H1	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
TM	H1	C-TM-H1-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2		Triple
TM	H1	(C-TM-H1-2)	Anti-Feedthrough	DE9M	DE9M IDC							
TM	H1	C-TM-H1-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+			
TM	H2	C-TM-H2-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5		
TM	H2	F-TM-H2	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
TM	H2	C-TM-H2-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2		Triple
TM	H2	(C-TM-H2-2)	Anti-Feedthrough	DE9M	DE9M IDC							
TM	H2	C-TM-H2-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+			
TM	H3	C-TM-H3-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5		
TM	H3	F-TM-H3	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
TM	H3	C-TM-H3-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2		Triple
TM	H3	(C-TM-H3-2)	Anti-Feedthrough	DE9M	DE9M IDC							
TM	H3	C-TM-H3-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+			
TM	H4	C-TM-H4-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5		
TM	H4	F-TM-H4	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
TM	H4	C-TM-H4-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2		Triple
TM	H4	(C-TM-H4-2)	Anti-Feedthrough	DE9M	DE9M IDC							
TM	H4	C-TM-H4-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+			

IM	H1	C-IM-H1-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5	
IM	H1	F-IM-H1	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
IM	H1	C-IM-H1-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
IM	H1	(C-IM-H1-2)	Anti-Feedthrough	DE9M	DE9M IDC						
IM	H1	C-IM-H1-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
IM	H2	C-IM-H2-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5	
IM	H2	F-IM-H2	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
IM	H2	C-IM-H2-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
IM	H2	(C-IM-H2-2)	Anti-Feedthrough	DE9M	DE9M IDC						
IM	H2	C-IM-H2-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
IM	H3	C-IM-H3-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5	
IM	H3	F-IM-H3	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
IM	H3	C-IM-H3-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
IM	H3	(C-IM-H3-2)	Anti-Feedthrough	DE9M	DE9M IDC						
IM	H3	C-IM-H3-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
IM	V1	C-IM-V1-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5	
IM	V1	F-IM-V1	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
IM	V1	C-IM-V1-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
IM	V1	(C-IM-V1-2)	Anti-Feedthrough	DE9M	DE9M IDC						
IM	V1	C-IM-V1-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
IM	V2	C-IM-V2-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5	
IM	V2	F-IM-V2	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
IM	V2	C-IM-V2-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
IM	V2	(C-IM-V2-2)	Anti-Feedthrough	DE9M	DE9M IDC						
IM	V2	C-IM-V2-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
IM	V3	C-IM-V3-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5	
IM	V3	F-IM-V3	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
IM	V3	C-IM-V3-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
IM	V3	(C-IM-V3-2)	Anti-Feedthrough	DE9M	DE9M IDC						
IM	V3	C-IM-V3-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
IM	PP	C-IM-PP/PR-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	4.5	
IM	PP/PR	F-IM-PP/PR	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
IM	PP/PR	C-IM-PP/PR-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
IM	PP/PR	(C-IM-PP/PR-2)	Anti-Feedthrough	DE9M	DE9M IDC						
IM	PP/PR	C-IM-PP/PR-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		

IM	PP	C-IM-PP/PR-4	Splitter	DE9F	DE9F	RJ22M	RJ22M		RJ22 Cable		0.2	See diagram
IM	PR	(C-IM-PP/PR-4)	Splitter	DE9F	DE9F	RJ22M	RJ22M		RJ22 Cable		0.2	See diagram
BF	LA	C-BF-LA-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon		4.5	
BF	LA	F-BF-LA	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
BF	LA	C-BF-LA-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon		0.2	Triple
BF	LA	(C-BF-LA-2)	Anti-Feedthrough	DE9M	DE9M IDC							
BF	LA	C-BF-LA-3	Basic External	DE9F		DE9M						
BF	PP/PR/PY	C-BF-PP/PR/PY-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon		4.5	
BF	PP/PR/PY	F-BF-PP/PR/PY	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
BF	PP/PR/PY	C-BF-PP/PR/PY-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon		0.2	Triple
BF	PP/PR/PY	(C-BF-PP/PR/PY-2)	Anti-Feedthrough	DE9M	DE9M IDC							
BF	PP/PR/PY	C-BF-PP/PR/PY-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+			
BF	PP	C-BF-PP/PR/PY-4	Splitter	DE9F	DE9F	RJ22M	RJ22M		RJ22 Cable		0.2	
BF	PR	(C-BF-PP/PR/PY-4)	Splitter	DE9F	DE9F	RJ22M	RJ22M		RJ22 Cable		0.2	
BF	PY	(C-BF-PP/PR/PY-4)	Splitter	DE9F	DE9F	RJ22M	RJ22M		RJ22 Cable		0.2	See diagram
BF	SV	C-BF-LA-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon		4.5	
BF	SV	F-BF-LA	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
BF	SV	C-BF-LA-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon		0.2	Triple
BF	SV	(C-BF-LA-2)	Anti-Feedthrough	DE9M	DE9M IDC							
BF	SV	C-BF-LA-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+			
BF	SV	C-BF-LA-3	Basic External	DE9F		CI01M	CI0104S0000	Wires				
SF	LA	C-SF-LA-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon		3.5	
SF	LA	F-SF-LA	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
SF	LA	C-SF-LA-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon		0.2	Triple
SF	LA	(C-SF-LA-2)	Anti-Feedthrough	DE9M	DE9M IDC							
SF	LA	C-SF-LA-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+			
SF	SV	C-SF-SV-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon		3.5	
SF	SV	F-SF-SV	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)
SF	SV	C-SF-SV-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon		0.2	Triple
SF	SV	(C-SF-SV-2)	Anti-Feedthrough	DE9M	DE9M IDC							
SF	SV	C-SF-SV-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+			
SF	SV	C-SF-SV-4	Basic External	DE9F		???						
PI	G1	C-SF-G1-0	Adapter	10-6 F		DE9F					2	See diagram
PI	G1	C-SF-G1-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon		3	
PI	G1	F-SF-G1	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough			(Flip)

PI	G1	C-SF-G1-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	G1	(C-SF-G1-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	G1	C-SF-G1-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	G2	C-SF-G2-0	Adapter	10-6 F		DE9F				2	See diagram
PI	G2	C-SF-G2-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	3	
PI	G2	F-SF-G2	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	G2	C-SF-G2-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	G2	(C-SF-G2-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	G2	C-SF-G2-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	G3	C-SF-G3-0	Adapter	10-6 F		DE9F				2	See diagram
PI	G3	C-SF-G3-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	3	
PI	G3	F-SF-G3	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	G3	C-SF-G3-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	G3	(C-SF-G3-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	G3	C-SF-G3-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	L1	C-PI-L1-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	2	
PI	L1	F-PI-L1	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	L1	C-PI-L1-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	L1	(C-PI-L1-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	L1	C-PI-L1-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	L2	C-PI-L2-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	2	
PI	L2	F-PI-L2	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	L2	C-PI-L2-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	L2	(C-PI-L2-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	L2	C-PI-L2-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	L3	C-PI-L3-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	2	
PI	L3	F-PI-L3	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	L3	C-PI-L3-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	L3	(C-PI-L3-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	L3	C-PI-L3-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	LV	C-PI-LV-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	2	
PI	LV	F-PI-LV	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	LV	C-PI-LV-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	LV	(C-PI-LV-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	LV	C-PI-LV-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		

PI	S1	C-PI-S1-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	2	
PI	S1	F-PI-S1	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	S1	C-PI-S1-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	S1	(C-PI-S1-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	S1	C-PI-S1-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	S1	C-PI-S1-4	Basic External	DE9F		CI01M	CI0104S0000	Wires			
PI	S2	C-PI-S2-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	2	
PI	S2	F-PI-S2	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	S2	C-PI-S2-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	S2	(C-PI-S2-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	S2	C-PI-S2-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	S2	C-PI-S2-4	Basic External	DE9F		CI01M	CI0104S0000	Wires			
PI	S3	C-PI-S1-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	2	
PI	S3	F-PI-S1	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	S3	C-PI-S1-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	S3	(C-PI-S1-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	S3	C-PI-S1-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	S3	C-PI-S1-4	Basic External	DE9F		CI01M	CI0104S0000	Wires			
PI	PY	C-PI-PY-1	Basic In-Vacuum	DE9M	DE9M IDC	DE9F	DE9F IDC	Ribbon	Ribbon	2	
PI	PY	F-PI-PY	Feedthrough	DE9M		DE9M		Feedthrough	Feedthrough		(Flip)
PI	PY	C-PI-PY-2	Anti-Feedthrough	DE9F	DE9F IDC	DE9M	DE9M IDC	Ribbon	Ribbon	0.2	Triple
PI	PY	(C-PI-PY-2)	Anti-Feedthrough	DE9M	DE9M IDC						
PI	PY	C-PI-PY-3	Basic External	DE9F		DE9M			D-Sub, M/F, 8m+		
PI	PY	C-PI-PY-4	Adapter	DE9F		RJ22M	RJ22M		RJ22 Cable		0.2 See diagram

DE9F IDC	54	=	27	+	27	+	0
DE9M IDC	81	=	54	+	27	+	0
D-Sub, M/F, 8m+	25	=	0	+	0	+	25
Feedthrough	27	=	0	+	0	+	27
CI0104S0000	4	=	0	+	4	+	0
RJ22M	6	=	0	+	6	+	0

Ribbon Cable

106.4 m

RJ22 Cable

1.2 m