

FLUIDS, POWER AND DATA HYBRID CONNECTORS

Air compression up to 7 bars

Sterilizable up to 500 cycles

Up to 10,000 mating cycles, high shock and vibration resistance

MEDICAL | THERAPEUTIC | SURGICAL

Certified to **ISO 13485:2016** "Medical devices – Quality management systems – Requirements for regulatory purposes", Fischer Connectors manufactures quality products that are **safe and reliable for integration into medical devices.**

INSTRUMENTATION | TEST & MEASUREMENT

The helium and hydrogen sniffer **leak detector** from Pfeiffer Vacuum stands for high sensitivity (10⁻⁷ mbar l/s), accuracy and repeatability in industrial applications. It features **two Fischer Core hybrid connectors** with **8 electrical contacts** and **1 fluidic tube** resisting high mating cycles.

(Photo with Pfeiffer Vacuum's kind support)





FLUIDIC CONNECTIVITY SOLUTIONS

SINGLE F SIZE 104 LAYOUT A118

Fischer Core Series Brass 1 single fluidic insert

CONNECTOR DIMENSIONS in millimeters (mm)

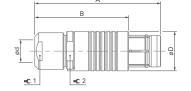


Part number

S 104 A118

A B

48 36 15



Q1

12

Torque 1

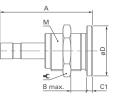
(Nm)

2.0

¥2

13





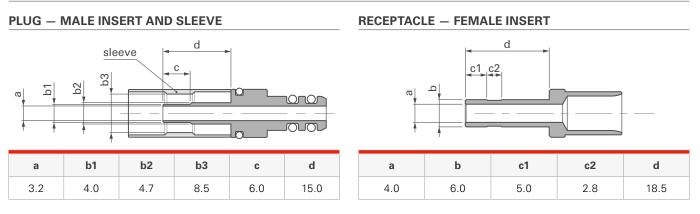
Part number	А	B max	C1	D	М	Ŷ	Torque (Nm)
D 104 A118	35	11	2.2	19	15x1	17	4.0

FLUIDIC INSERT DIMENSIONS in millimeters (mm)

D

d max

8.7



FLUIDIC INSERT CHARACTERISTICS*

	Material		Mech	anical
Insert	Insert Nickel plated brass (CuZn39Pb3)		Max pressure (bar)	7
O-ring	FPM (Viton®)		Mating cycles	10,000

* For additional connector characteristics, please refer to Technical Specifications, Volume 1, Fischer Core Series Brass.

FLUIDIC CONNECTIVITY SOLUTIONS

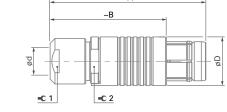
MIXED F8 SIZE 104 LAYOUT A106





CONNECTOR DIMENSIONS in millimeters (mm)

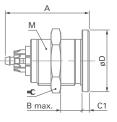




Part number	А	в	D	d <i>max</i>	¥1	Torque 1 (Nm)	¥2
S 104 A106-130+	50	38	15	8.7	12	2.0	13

C	(internet internet in	
1		

RECEPTACLE – FEMALE INSERT

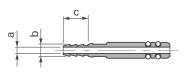


Part number	А	B max	C1	D	М	Ŷ	Torque (Nm)
D 104 A106-130	26	11	2.2	19	15x1	17	4.0

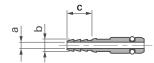
FLUIDIC INSERT DIMENSIONS in millimeters (mm)

PLUG - MALE INSERT

a 1.4



b	C
2.6	5.5



а	b	с
1.4	2.6	5.5

FLUIDIC INSERT CHARACTERISTICS**

	Material		Mech	anical
Insert	Insert Nickel plated brass (CuZn39Pb3)		Max pressure (bar)	7
O-ring	FPM (Viton®)		Mating cycles	10,000

**For additional connector characteristics, please refer to Technical Specifications, Volume 1, Fischer Core Series Brass.

ELECTRICAL CHARACTERISTICS

Size	Number of	Contact	Insulating	Contact ø	Test voltage Wire size DC		Rated voltage	Current			
and layout	electrical contacts	type	material	(mm)	(max ø 0.79 mm)	Contact to body	Contact to contact	Contact to body	Contact to contact	r.m.s. (V)	(A)
104 A106	8	Solder	PEEK	0.9	AWG 21 [1] AWG 22 [7/30]	1.8	1.8	2.7	2.7	≤ 320	4.9

*The 104 A106 hybrid configuration with 8 electrical contacts is compliant with Ethernet 5 Gbit/s data transmission (Ethernet 5GBASE-T IEEE standard 802.3bz-2016).

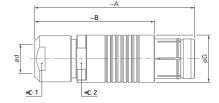
MIXED F6 SIZE 105 LAYOUT A130

Fischer Core Series Brass 1 single fluidic insert 6 electrical contacts



CONNECTOR DIMENSIONS in millimeters (mm)





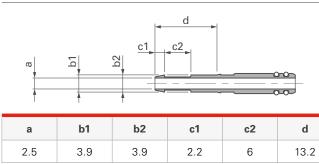
Part number	А	в	D	d <i>max</i>	¥ 1	Torque 1 (Nm)	¥2
S 105 A130-130+	62	47	18	10.7	15	3.5	16

A *	
 M _	
B max.	_ Q

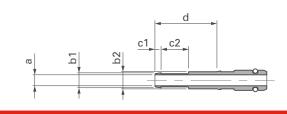
Part number	А	B max	C1	D	М	Ŷ	Torque (Nm)
D 105 A130-130	39	15	2.0	22	18x1	22	6.0

FLUIDIC INSERT DIMENSIONS in millimeters (mm)

PLUG – MALE INSERT



RECEPTACLE – FEMALE INSERT



а	b1	b2	c1	c2	d
2.5	3.4	3.9	1.4	6.3	13.2

FLUIDIC INSERT CHARACTERISTICS*

Material					
Insert	Nickel plated brass (CuZn39Pb3)				
O-ring	FPM (Viton®)				

Mechanical							
Max pressure (bar)	7						
Mating cycles	10,000						

* For additional connector characteristics, please refer to Technical Specifications, Volume 1, Fischer Core Series Brass.

ELECTRICAL CHARACTERISTICS

and	Number of electrical contacts	Contact	Contact Insulating type material	Contactø (mm)	Wire size (max ø 0.79 mm)	Test voltage AC r.m.s. DC			Rated voltage	Current	
		type				Contact to body	Contact to contact	Contact to body	Contact to contact	r.m.s. (V)	(A)
105 A130	6	Solder	PEEK	0.9	AWG 21 [1] AWG 22 [7/30]	1.8	3.0	2.7	4.1	≤ 320	5.5

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