

### Product Features

- ✧ Compliant with SFF- 8665
- ✧ Up to 28.3125Gbps data rate per channel
- ✧ Up to 5m transmission
- ✧ Operating temperature: 0~70℃
- ✧ Single 3.3V power supply
- ✧ RoHS compliant



### Applications

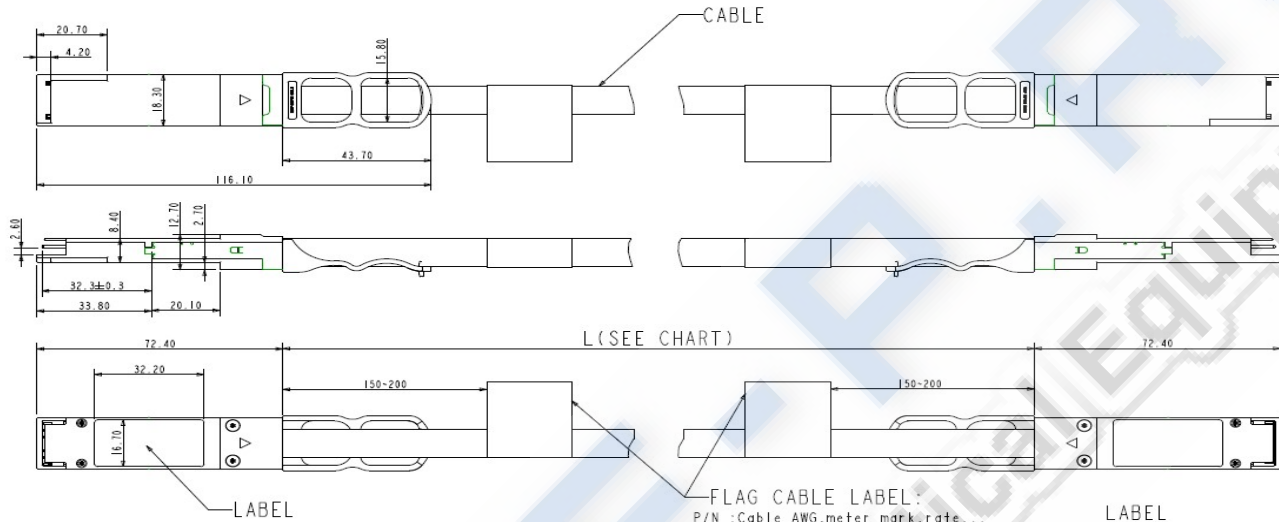
- ✧ Cost-effective copper solution
- ✧ Lowest total system power solution
- ✧ Lowest total system EMI solution
- ✧ Optimized design for Signal Integrity
- ✧ 100G Ethernet

### Ordering Information

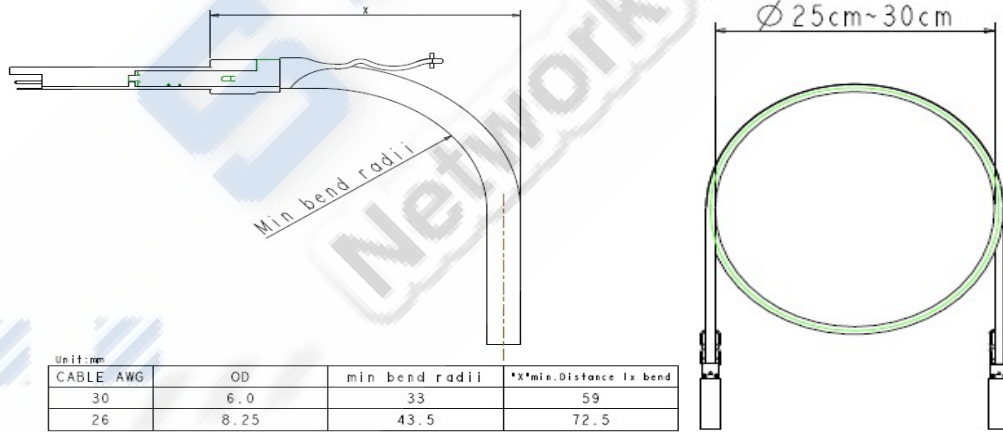
Part Number	Distance
FH-DP10TxxQQyy	100G Direct Attach Cables Passive xx (AWG) YY (0.5-5m)



**Product Description**



代码	长度范围 (m)	公差 (cm)
L	$L \leq 0.5$	$\pm 3$
	$0.5 < L \leq 5$	$\pm 5$
	$5 < L \leq 20$	$\pm 8$
	$20 < L$	$\pm 10$



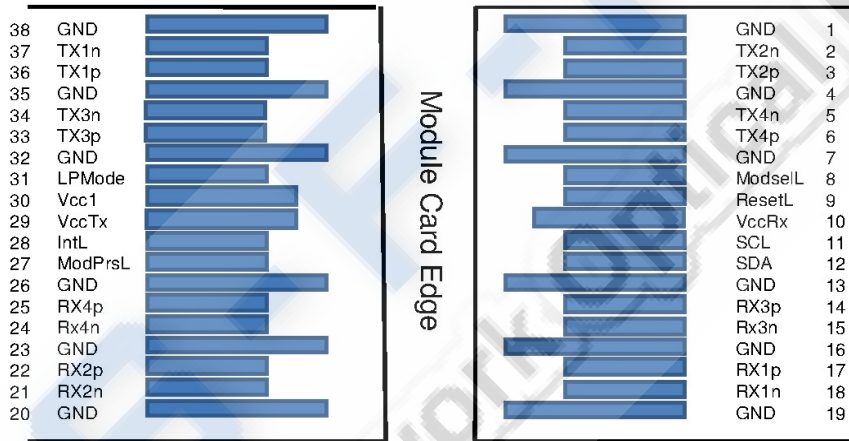
Unit:mm			
CABLE AWG	OD	min bend radii	*X*min.Distance 1x bend
30	6.0	33	59
26	8.25	43.5	72.5

**Pin Function Definition**

Pin	Logic	Symbol	Description
1		GND	Ground
2	CML-I	Tx2n	Transmitter Inverted Data Input
3	CML-I	Tx2p	Transmitter Non-Inverted Data Input
4		GND	Ground
5	CML-I	Tx4n	Transmitter Inverted Data Input
6	CML-I	Tx4p	Transmitter Non-Inverted Data Input
7		GND	Ground
8	LVTTL-I	ModSelL	Module Select
9	LVTTL-I	ResetL	Module Reset
10		Vcc Rx	+3.3V Power Supply Receiver
11	LVC MOS-I/O	SCL	2-wire serial interface clock
12	LVC MOS-I/O	SDA	2-wire serial interface data
13		GND	Ground
14	CML-O	Rx3p	Receiver Non-Inverted Data Output
15	CML-O	Rx3n	Receiver Inverted Data Output
16		GND	Ground
17	CML-O	Rx1p	Receiver Non-Inverted Data Output
18	CML-O	Rx1n	Receiver Inverted Data Output
19		GND	Ground
20		GND	Ground
21	CML-O	Rx2n	Receiver Inverted Data Output
22	CML-O	Rx2p	Receiver Non-Inverted Data Output
23		GND	Ground
24	CML-O	Rx4n	Receiver Inverted Data Output
25	CML-O	Rx4p	Receiver Non-Inverted Data Output
26		GND	Ground
27	LVTTL-O	ModPrsL	Module Present



28	LVTTL-O	IntL	Interrupt
29		Vcc Tx	+3.3V Power supply transmitter
30		Vcc1	+3.3V Power supply
31	LVTTL-I	LPMODE	Low Power Mode
32		GND	Ground
33	CML-I	Tx3p	Transmitter Non-Inverted Data Input
34	CML-I	Tx3n	Transmitter Inverted Data Input
35		GND	Ground
36	CML-I	Tx1p	Transmitter Non-Inverted Data Input
37	CML-I	Tx1n	Transmitter Inverted Data Input
38		GND	Ground



Top Side  
Viewed From Top

Bottom Side  
Viewed From Bottom

### General Product Characteristics

QSFP+ DAC Specifications	
Number of Lanes	Tx & Rx
Channel Data Rate	28.3125 Gbps
Operating Temperature	0 to + 70°C
Storage Temperature	-40 to + 85°C
Supply Voltage	3.3 V nominal
Electrical Interface	38 pins edge connector
Management Interface	Serial, I <sup>2</sup> C

**High Speed Characteristics**

Parameter	Symbol	Min	Typ	Max	Units	Notes
Differential Impedance	Zd	90	100	110	Ω	
Differential Input Return Loss	SDDXX	$< -12 + 2 * \text{SQRT}(f)$ with f in GHz			dB	0.01~4.1GHz
		$< -6.3 + 13 * \text{Log}10(f/5.5)$ with f in GHz			dB	4.1~19GHz
Common Mode Output Return Loss	SCCXX	$< -7 + 1.6 * f$ with f in GHz			dB	0.01~12.89GHz
				-3	dB	12.89~19GHz
Difference Waveform Distortion Penalty	dWDPc			6.75	dB	
VMA Loss	L			4.4	dB	
VMA Loss to Crosstalk Ratio	VCR	32.5			dB	

**Regulatory Compliance**

Feature	Test Method	Performance
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883C Method 3015.7	Class 1(>2000 Volts)
Electromagnetic Interference(EMI)	FCC Class B	Compliant with Standards
	CENELEC EN55022 Class B	
	CISPR22 ITE Class B	
RF Immunity(RFI)	IEC61000-4-3	Typically Show no Measurable Effect from a 10V/m Field Swept from 80 to 1000MHz
RoHS Compliance	RoHS Directive 2011/65/EU and it's Amendment Directives 6/6	RoHS 6/6 compliant



**FANG HANG**

100G QSFP28 DAC CABLE 1-5M

## For More Information

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S.F.P.F. Network Optical Equipment

