

OT9 8-way outdoor taps



- Compatible with Philips 9000 PBT taps
- Ingress Safe[™] unique passive ingress reduction technology
- AC-RF bypass switch, allowing faceplates to be changed without loss of power or RF
- Designed for extreme environmental conditions
- All connections front accessible



Overview

OT9 outdoor taps are compatible with Philips 9000 PBT taps. The OT9 series includes 8-, 4- and 2-way taps with a variety of tap losses. Providing integrated Ingress Safe™ noise reduction technology, 1 kV surge protection and excellent RF performance, the taps feature sealed female F-ports for drop cable connection on the faceplate and 5/8"-24 NEF-female ports for in and output cable connection on the housing. The housing has an AC-RF bypass switch as standard, allowing faceplates to be changed without loss of power or RF through the tap housing.

The taps may be strand mounted through the clamp at the back of the housing or surface mounted with an optional bracket. Tested under extreme environmental conditions, the taps are designed to operate near salt water, along busy highways and in very hot conditions.

Ingress Safe

Our patented Ingress Safe technology uses a phase cancellation technique to considerably reduce ingress created within the home. It has no adverse effect on the CATV spectrum and is transparent to the forward and reverse path signals.

- Significantly reduces noise on CATV networks, improving network performance
- Field tests show Ingress Safe units in the distribution network can deliver improvement in the carrier to noise ratio that averages from between 3 dB and 12 dB, depending on the network topology
- Prevents or delays the need to deploy technicians to rectify faults caused by the cumulative effects of ingress on network performance and customer service.



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Specifications

Minimi	_		MHz	8-11/I-T	8-1	14/1	8-1	17/1	8-2	20/I	8-2	23/I	8-2	26/I
min)¹	, ,	In to Out	5 - 1000	0.4	0	.4	0.4		0.4		0.4		0.4	
No No No No No No No No	eturn loss (switch) (dB,	In / Out	5 - 750	26.0	26	3.0	26.0		26.0		26.0		26.0	
In to Out	in)¹		750 - 1000	20.0	20	0.0							20.0	
				Тур Мах	Тур	Max								
Solation (birectivity) (dB, min)	sertion loss (dB)	In to Out ²	5 - 30			3.7		2.2		1.3		1.0		0.8
Mode			30 - 200			3.5		1.9		1.1		1.2		8.0
February Februar			200 - 400			3.5		2.3		1.3		1.2		1.0
Total			400 - 600	n/a		3.7		2.8		1.5		1.4		1.1
Return loss (dB, min) In/Out/Tap S - 30 30 30 3.8 2.5 2.1 2.1 2.1 3.0 3.8 3.			600 - 750			4.7		3.2		2.1		1.6		1.4
In to Tap ^{2,3} 5 - 870 11.0 13.0 14.0 16.5 17.0 18.5 20.0 21.5 23.0 24.5 26.0			750 - 870			5.1		3.5		2.3		1.8		1.6
Nation (dB, min)			870 - 1000			5.3		3.8		2.5		2.1		1.9
Solation (dB, min)		In to Tap ^{2, 3}	5 - 870	11.0 13.0	14.0	16.5	17.0	18.5	20.0	21.5	23.0	24.5	26.0	27.5
Solation (Directivity) (dB, min)			870 - 1000	11.0 13.0	14.0	17.0	17.0	19.0	20.0	21.5	23.0	24.5	26.0	27.5
Solation (Directivity) (dB, min)	olation (dB, min)	Tap to Tap	5 - 30	20	2	20	2	20	20		20		20	
Solation (Directivity) (dB, min)			30 - 750	23	2	13			23		23		23	
Mathematical Ma			750 - 1000	20	2	20	20		20		20		20	
200 - 600 600 - 750 600 - 750 750 - 870 222 24 25 26 27 25 26 27 25 26 27 25 26 27 22 22 23 24 25 26 27 20 22 22 22 25 26 27 20 22 22 22 25 26 27 20 22 22 25 26 27 20 22 22 25 26 27 20 22 22 25 26 27 20 22 22 25 26 27 20 22 22 25 26 27 20 22 22 25 26 27 20 22 22 25 26 27 20 22 22 25 26 27 20 22 22 25 26 27 20 20 22 22 25 26 27 20 20 22 22 25 26 27 20 20 22 22 25 26 27 20 20 20 22 22 25 26 27 20 20 20 22 22 25 26 27 20 20 20 20 20 20 22 22 25 20 20	olation (Directivity)	Out to Tap	5 - 30		2	20	20		20		20		20	
Return loss (dB, min) In/Out/Tap 5 - 30 16 16 16 16 16 16 16 1	IB, min)		30 - 200		2	24	25		26		27		28	
Return loss (dB, min)			200 - 600	n/o	2	22	2	25	2	26	2	27	2	28
Return loss (dB, min)			600 - 750	II/a	2	22	2	24	2	25	2	26	2	27
Return loss (dB, min) In/Out/Tap 5 - 30 16			750 - 870		2	22	2	.3	2	24	2	25	2	26
30 - 750 18 18 18 18 18 18 18 1			870 - 1000		2	20	2	22	2	22	2	25	2	16
Screening efficiency (dB, typ). Minimum exceeds S - 300 95.0 95	eturn loss (dB, min)	In/Out/Tap	5 - 30	16	1	6	16		16				16	
Screening efficiency (dB, typ). Minimum exceeds Signature S			30 - 750	18	1	8	1	8	1	8	1	8	1	8
typ). Minimum exceeds Class A.4 300 - 470 470 - 950 950 - 1000 300 - 1200 90.0 85.0 65.0 65.0 65.0 65.0 65.0 65.0 65.0 6			750 - 1000	16	1	6	1	6	1	6	1	6	1	6
Class A.4 470 - 950 85.0	creening efficiency (dB,		5 - 300	95.0	95	5.0	95.0		95.0		95.0		95.0	
950 - 1000 65.0 65.0 65.0 65.0 65.0 65.0 5 - 300	17		300 - 470	90.0	90	0.0	90.0				90.0		90.0	
Company Com	lass A.4		470 - 950	85.0	85	5.0	85.0		1				85.0	
Power passing (Amps AC/DC) ⁶			950 - 1000	65.0	65	5.0	65.0						65.0	
Power passing (Amps AC/DC) ⁶ 12 Hum modulation (dB, typ) ⁷ All ports 5 - 1000 -70 Ingress Safe port Ports 1, 2, 5 and 6 Surge Class conformance ⁸ All ports 6KV combination wave 2 Ω Impedance (C1)	GTEM)⁵		5 - 300	110.0					11	0.0				0.0
AC/DC) ⁶ 12 Hum modulation (dB, typ) ⁷ All ports 5 - 1000 Ingress Safe port Ports 1, 2, 5 and 6 Surge Class conformance ⁸ All ports 6KV combination wave 2 Ω Impedance (C1)			300 - 1200	100.0	10	0.0	10	0.0	10	0.0	10	0.0	10	0.0
typ)7 All ports 5 - 1000 -70 Ingress Safe port Ports 1, 2, 5 and 6 Surge Class conformance8 All ports 6KV combination wave 2 Ω Impedance (C1)				12										
Ingress Safe port Ports 1, 2, 5 and 6 Surge Class conformance ⁸ All ports 6KV combination wave 2 Ω Impedance (C1)	,	All ports	5 - 1000	-70										
Surge Class conformance ⁸ All ports 6KV combination wave 2 Ω Impedance (C1)	.,			Ports 1, 2, 5 and 6										
	urge Class conform-	All ports												
		LxHxD		120.5x80.5x60										
Equipment Approval CE														

Remarks

1	Faceplate removed
2	+0.5dB insertion loss tolerance above +30°C
3	Additional 0.5 dB loss for Ingress Safe circuit on ports 1, 2, 5, and 6
4	Tested according to EN 50083-2:2006
5	Tested according to SCTE IPS-TP403
6	Range between 60-90 VAC/ VDC
7	At 12 Amp power passing
8	Tested according to IEC 61000-4-5 2005

Ordering information

Item Name	Article number			
OT9-8-11/I-T	10480812			
OT9-8-14/I	10480815			
OT9-8-17/I	10480818			

Item Name	Article number
OT9-8-20/I	10480821
OT9-8-23/I	10480824
OT9-8-26/I	10480827





Mechanical & environmental specifications

		Details		
Port Sealing	Environmental (epoxy) seal	All F-ports		
Connectors	Input & Output	KS-female (5/8"-24NEF)		
	Tap ports	TAP ports - F Female		
	ANSI/SCTE 01 (outdoor) comply	All F-ports		
	F-connector torque	10Nm (88.51 In-Lb)		
	F-connector brass with NiSn (60/40) plating	>1.5µm		
	F connector inserts F-inner spring with Ag plating	>0.6µm		
Water Immersion	Tighten torque on connectors	2.26Nm (< 20 In-Lb)		
(IP08)	Water head	2m (6.56 ft)		
	Duration	500 hrs		
	Observation: No water leak	No electrical degradation after dry		
Temperature cycling with humidity	Temperature	+4°C to +60°C (+39.2°F to +140°F)		
(EN 60068-2-30:2005)	Extreme temp duration	3 hrs		
	Transient	3 hrs		
	Humidity	95% RH		
	Number of cycles	20		
	Observation: (no water leakage)	No electrical degradation after dry		
High Temperature cycling	Temperature	+60°C (+140°F)		
(EN 60068-2-2:2007)	Duration	48 hrs		
	Observation: No crack or damage	No electrical degradation after dry		
Drop Test	75cm (29.5 in) high onto concrete floor or metal plate surface	Corner, Edge & Port		
(EN 60068-2-32:1993,	Number of drop for each impact points	1		
IEC 68-2-32:1975)	Observation: No crack on metal	No electrical performance degradation		
Salt Fog	Tighten torque on connectors	2.26Nm (< 20 In-Lb)		
(MSTM-B-117)	Temperature	+35°C (+95°F)		
	Salt percentage & acidity	5% & pH7		
	Duration	1000 hrs		
	Number of cycles	Continues		
	Observation: (No electrical performance degradation)	No metal corrosion or salt incursion		
WEEE (2002/96/EC)	Complete product	Marked with wheelie bin logo		
RoHS (2002/95/EC)	Complete product	Complies to RoHS		
Temperature	Operating temperature	-40°C to +60°C (-40°F to +140°F)		

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