

# Catalog of Cygnus planetary nebulae



Many more planetary nebulae await you in Cygnus the Swan. This table includes information on all 53 planetaries.

**Bold entries are described in Phil Harrington's "Explore planetary nebulae in Cygnus" (Astronomy, July 2009).**

Catalog designation	R.A.	Dec.	Mag.	Mag. central star	Size	Class
PK77+14.1	19h19.2m	+46°15'	14.4p	17.3	192"	2b
<b>PK64+5.1</b>	<b>19h34.8m</b>	<b>+30°31'</b>	<b>9.6p</b>	<b>10.0</b>	<b>7.5"</b>	<b>4</b>
<b>NGC 6826</b>	<b>19h44.8m</b>	<b>+50°31'</b>	<b>9.8p</b>	<b>10.4</b>	<b>27" by 24"</b>	<b>3a+2</b>
NGC 6833	19h49.7m	+48°58'	13.8p	14.8	1"	2
PK69+3.1	19h50.0m	+33°46'	16.4p	—	30"	3b+6
PK66+2.1	19h51.0m	+31°03'	—	—	12"	—
PK68+3.1	19h51.9m	+33°00'	14.7p	—	5"	1
PK68+1.1	19h56.6m	+32°22'	15.9p	—	3"	—
PK68+1.2	19h59.3m	+31°55'	14.1v	21.1	22"	3b
Kohoutek 3-73	20h03.9m	+49°19'	15.2p	20.8	16"	—
PK75+4.1	20h04.3m	+39°36'	16.0v	—	28"	3b
PK68-0.1	20h04.8m	+31°28'	16.0v	21	16" by 11"	3b+6
PK79+6.1	20h06.9m	+44°14'	16.3p	—	4"	2
PK69+0.1	20h07.0m	+32°17'	—	—	5"	—
PK84+9.1	20h08.7m	+42°30'	16.1p	—	20"	—
PK79+5.1	20h09.0m	+43°44'	14.5p	—	15"	4+2
<b>NGC 6884</b>	<b>20h10.4m</b>	<b>+46°28'</b>	<b>12.6p</b>	<b>15.6</b>	<b>6"</b>	<b>2b</b>
NGC 6881	20h10.9m	+37°25'	14.3p	18.3	4"	2a+3
PK77+3.1	20h12.4m	+40°45'	15.5p	—	6"	—
PK72+0.1	20h12.8m	+34°21'	15.8p	—	6"	—
PK68-2.1	20h14.0m	+29°34'	—	—	5"	—
PK77+3.2	20h15.4m	+40°35'	17.0p	—	4"	—
<b>NGC 6894</b>	<b>20h16.4m</b>	<b>+30°34'</b>	<b>14.4p</b>	<b>18.1</b>	<b>44" by 39"</b>	<b>4+2</b>
PK71-2.1	20h21.1m	+32°29'	14.6p	15.7	5"	1
PK69-3.1	20h22.0m	+30°00'	18.6p	—	8"	?+3
PK73-2.1	20h25.1m	+33°34'	17.2v	—	4"	—
PK78+0.1	20h29.3m	+40°15'	17.1p	—	8"	—

Catalog designation	R.A.	Dec.	Mag.	Mag. central star	Size	Class
PK86+5.1	20h31.9m	+48°53'	15.1v	18.1	190"	—
PK 85+4.1	20h32.4m	+47°21'	15.2p	18.9	156"	3b
PK78-2.1	20h42.3m	+37°41'	16.0p	—	20"	—
PK84+1.1	20h45.2m	+44°39'	—	—	27"	—
PK92+5.1	20h53.2m	+53°46'	17.8p	—	12"	—
<b>NGC 7008</b>	<b>21h00.6m</b>	<b>+54°33'</b>	<b>13.3p</b>	<b>13.2</b>	<b>86"</b>	<b>3</b>
<b>NGC 7026</b>	<b>21h06.3m</b>	<b>+47°51'</b>	<b>12.7p</b>	<b>14.2</b>	<b>40"</b>	<b>3a</b>
<b>NGC 7027</b>	<b>21h07.0m</b>	<b>+42°14'</b>	<b>10.4p</b>	<b>16.2</b>	<b>18" by 11"</b>	<b>3a</b>
PK84-4.1	21h07.7m	+40°58'	17.1p	—	6"	—
PK91+1.1	21h10.9m	+50°47'	—	21	25"	—
PK89-0.1	21h14.1m	+47°46'	14.5p	19.7	64" by 28"	3a
<b>NGC 7048</b>	<b>21h14.3m</b>	<b>+46°17'</b>	<b>11.3p</b>	<b>19.1</b>	<b>61"</b>	<b>3b</b>
PK87-3.1	21h18.1m	+43°49'	—	—	35"	—
PK89-2.1	21h19.1m	+46°19'	—	12.1	7"	2a
PK93+1.1	21h20.7m	+51°53'	16.9p	—	7"	—
PK83-8.1	21h22.3m	+38°07'	15.4p	15.7	10"	—
PK96+2.1	21h30.0m	+54°27'	16.8p	14.8	6"	2
PK93-0.1	21h30.9m	+50°00'	16.0p	19.5	24"	—
PK95+0.1	21h31.8m	+52°34'	16.0p	—	3"	—
IC 5117	21h32.5m	+44°36'	13.3p	16.7	1"	2
PK86-8.1	21h33.1m	+39°38'	12.7p	17.36	32" by 20"	2
PK81-14.1	21h35.5m	+31°42'	16.0p	13.2	120" by 100"	4
PK93-2.1	21h37.0m	+48°56'	13.2p	19.1	60" by 42"	4
PK91-4.1	21h38.8m	+46°00'	14.6p	—	8"	—
PK95-2.1	21h43.3m	+50°25'	15.8p	—	8"	1
PK97-2.1	21h57.7m	+51°42'	14.5p	15.1	4"	2

**Key:**

R.A.=Right ascension (2000.0)

Dec.=Declination (2000.0)

Mag.=total photographic magnitude of nebula (p) or total visual magnitude (v)

Planetary nebulae are often classified on a 1 to 6 scale based on their appearance. This system, called the Vorontsov-Velyaminov scale, was devised by the Russian astrophysicist Boris Vorontsov-Velyaminov (1904–1994):

1=Stellar image

2=Smooth disk (a, brighter toward center; b, uniform brightness; c, traces of a ring structure)

3=Irregular disk (a, very irregular brightness distribution; b, traces of ring structure)

4=Ring structure

5=Irregular form, similar to a diffuse nebula

6=Anomalous form; Planetary nebulae with more complex structures are characterized by combinations of classes. For instance, NGC 6826 is rated "3a + 2" for its complex disk morphology.