



Pneumatic Hi-ROTOR PRN Series

Vane Type Rotary Actuator

- Durability to high temperature.
- Easy-to-use oscillating angle.
- You can install the sensor.

Specification

Model No.	Unit	PRNA1S			PRNA3S			PRNA10S			PRNA20S			PRN30S		
Vane		Single vane														
Fluid		Non-lubricated air (Lubricated air)														
Oscillating angle	Degree	90 ⁺⁴	180 ⁺⁴	270 ⁺⁴	90 ⁺⁴	180 ⁺⁴	270 ⁺⁴	90 ⁺⁴	180 ⁺⁴	270 ⁺⁴	90 ⁺⁴	180 ⁺⁴	270 ⁺⁴	90 ⁺³	180 ⁺³	270 ⁺³
Oscillating reference point	Degree	45,90		45	45,90		45	45,90		45	45,90		45	45		
Port size		M5												Rc1/8		
Minimum working pressure	MPa	0.1									0.08			0.1		
Operation pressure range	MPa	0.2~0.7									0.2~1					
Proof withstanding pressure	MPa	1.05									1.5					
Temperature range	℃	-5~80												-5~60		
Maximum frequency of use	Hz	5	3	1.6	4	2.5	1	4	2.5	1.5	3.5	2	1	3	1.5	1
Internal volume	cm³	1.4	1.4	1.5	3.4	3.4	4	9.8	9.8	12	17	17	21	37	37	43
Allowable radial load	N	30			40			50			300			400		
Allowable thrust load	N	3			4			4			25			30		
Allowable energy	mJ	0.6			1.5			3			15			25		
Mass	kg	0.036			0.07			0.14			0.25			0.47		0.46

Model No.	Unit	PRNA1D			PRNA3D			PRNA10D			PRNA20D			PRN30D		
Vane		Double vane														
Fluid		Non-lubricated air (Lubricated air)														
Oscillating angle	Degree	90 ⁺⁴			90 ⁺⁴			90 ⁺⁴			90 ⁺⁴			90 ⁺³		
Oscillating reference point	Degree	45			45			45			45			45		
Port size		M5												Rc1/8		
Minimum working pressure	MPa	0.08			0.07						0.06			0.08		
Operation pressure range	MPa	0.2~0.7									0.2~1					
Proof withstanding pressure	MPa	1.05									1.5					
Temperature range	℃	-5~80												-5~60		
Maximum frequency of use	Hz	5			4			4			3			3		
Internal volume	cm³	1.1			2.8			8.1			15			34		
Allowable radial load	N	30			40			50			300			400		
Allowable thrust load	N	3			4			4			25			30		
Allowable energy	mJ	0.6			1.5			3			15			25		
Mass	kg	0.037			0.072			0.14			0.26			0.48		

(Note) •Maximum frequency of use at the supply pressure of 0.5 MPa (Unloaded).

•Make sure to use the HI-ROTOR within allowable energy. Refer to page 68 for the allowable energy calculation.

•HI-ROTORs with keyways are provided with keys.

•For HI-ROTORs other than standard, consult KURODA.