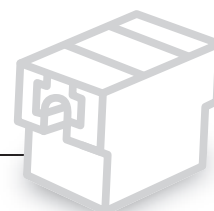


# KPH-2 series

Gripper innovation! **promano**



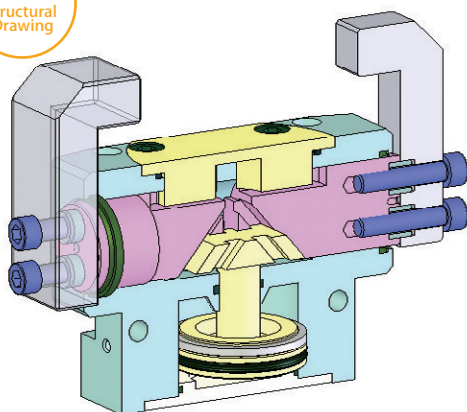
2-Jaw Parallel Gripper with Sealed Body

Waterproof and dustproof design to endure the most severe conditions

## Features

- Waterproof and dustproof design to endure the most severe conditions
- Light weight and Compact body
- High repeatability and Long operating life

3D  
Structural  
Drawing



## How to Order

**K P H 1 3 3 - 2 N B**

Series ※1		Size		Number of Jaws		Safety device ※2		Proximity Switch Bracket ※3	
KPH-2	NBR seals	073	088	2	2-Jaw	N	Without device	N	Without bracket
FPH-2	FKM seals	108	133			A	For internal gripping	B	With brackets
						C	For external gripping		

## Notes

- Operating temperature for FKM seals is same as for NBR seals.
- The safety device will ensure a minimum gripping force is maintained via a mechanical mechanism if there is a loss of pneumatic pressure.
- Proximity Switch Bracket attaches the proximity switch on the body for confirmation of jaw opening / closing. Choosing option "B" means "with brackets", 1 set of brackets (1 opening side and 1 closing side) is supplied. In case that reed switches are needed, they can be attached on the switch housing on the external body. Proximity switches and reed switches can be chosen referring to the "Switch Compatibility Table" on page 53.

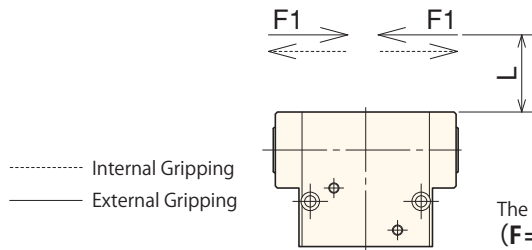
### Specifications

Model	Jaw Stroke (diameter) (mm)	Gripping Force (F) *1			Repeatability (mm)	Net Weight (kg)	Air Consumption (oil / reciprocating)	Air Pressure*2 (MPa)	Operating Temperature (°C)
		Measured Distance (mm)	External Gripping (N)	Internal Gripping (N)					
KPH073-2	12	10	200	222	±0.01	0.48	7.3	0.2~0.8	5~60
KPH088-2	16	10	348	382		0.7	16.5		
KPH108-2	20	20	536	584		1.4	31.9		
KPH133-2	24	25	817	880		2.3	59.4		

\*1At Air Pressure 0.6MPa

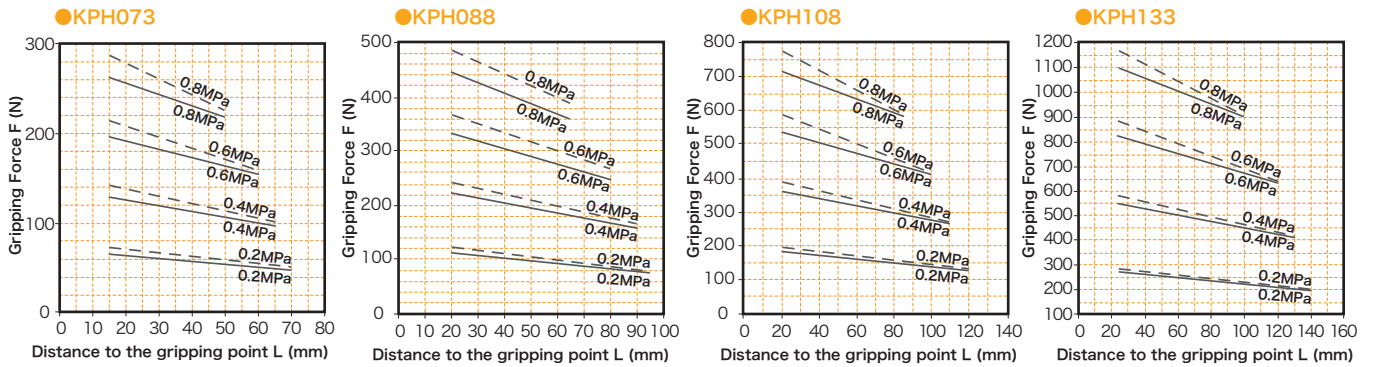
\*2 WITHOUT Safety Device. Please refer to the specification table of Option - Safety Device for Air Pressure WITH Safety Device.

### Gripping Characteristic Graph

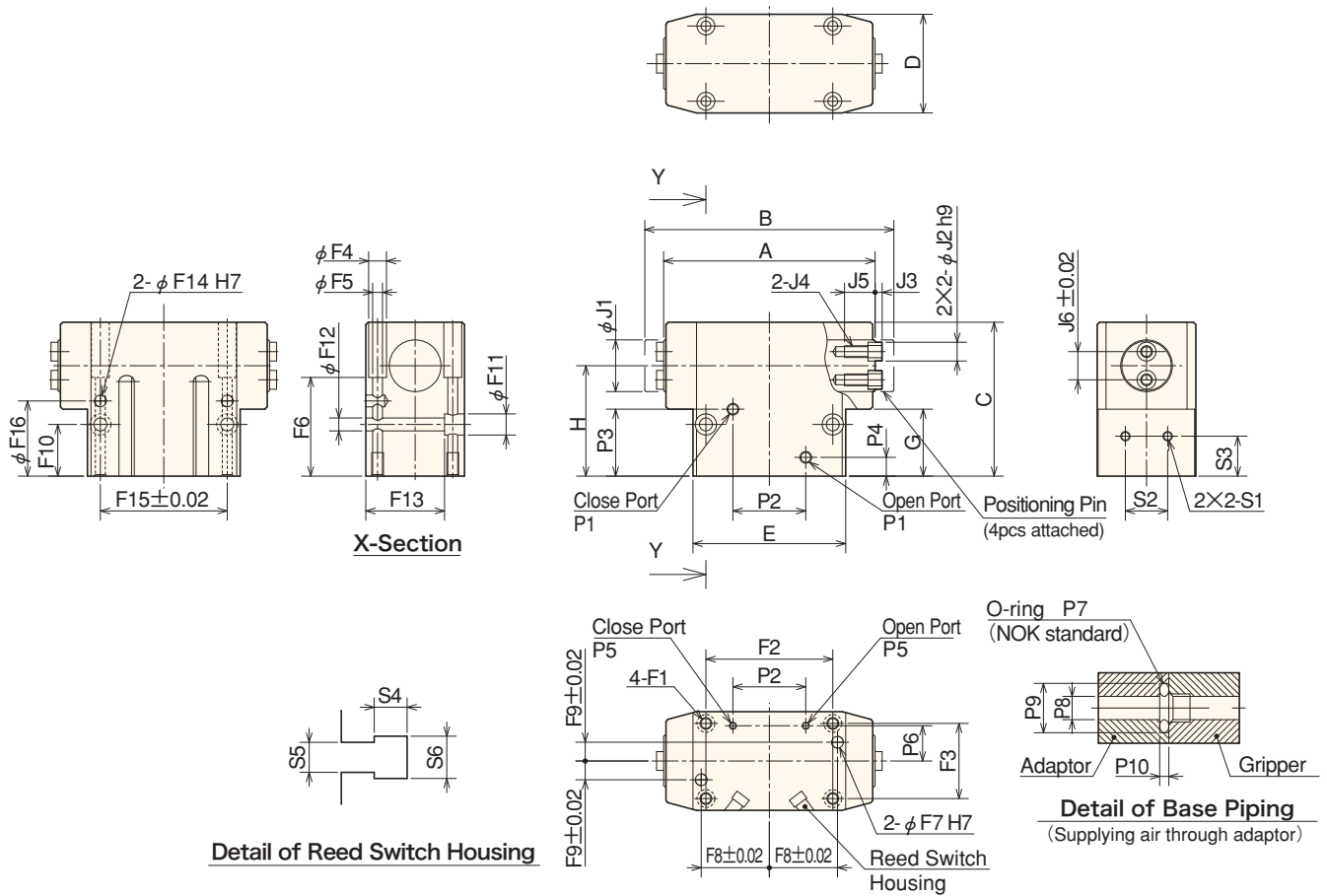


The gripping force "F" shows the actual measured value per jaw "F1" × the number of jaws. (F = F1 × 2)

The point to be measured gripping force



## ■ Dimensional Drawings



## ■ Dimensions

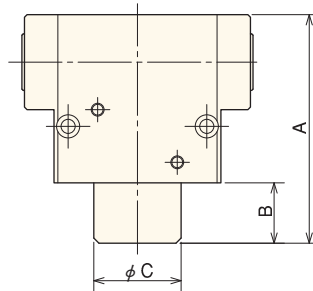
Model	Outline Dimensions							Dimensions of Jaw Mounting					
	A	B	C	D	E	G	H	J1	J2 Diameter (H9)	J3	J4 Diameter	J5	J6 (±0.02)
KPH073-2	75	87	56	36	52	24	39.5	φ 18	φ 6	3	M4	9	10
KPH088-2	90	106	65.5	42	65	28.5	47	φ 22	φ 8	3	M5	11	12
KPH108-2	110	130	77.5	50	82	32	54.5	φ 28	φ 10	4	M6	13	14
KPH133-2	135	159	90	60	105	38.5	64	φ 32	φ 12	4	M8	16	16

Model	Dimensions of Body Fixed Part																		
	F1		F2	F3	F4	F5	F6	F7		F8	F9	F10	F11	F12	F13	F14		F15	F16
	Diameter	Depth					Diameter (H7)	Depth	(±0.02)	(±0.02)					Diameter (H7)	Depth	(±0.02)	(±0.02)	
KPH073-2	M5	8	44	27	φ 7.6	φ 4.2	42	φ 4	8	23	6.5	19.5	8	φ 4.5	29	φ 4	8	44	27.5
KPH088-2	M5	8	54	32	φ 7.4	φ 4.2	42	φ 5	10	29	8	22	φ 9	φ 5.5	34.5	φ 5	8	54	32
KPH108-2	M6	9	70	38	φ 9	φ 5.2	61	φ 6	12	36	10	25.5	11	φ 6.5	41	φ 6	9	70	36.5
KPH133-2	M8	12	90	46	φ 11	φ 6.2	71	φ 8	12	46	11	31	14	φ 8.5	49	φ 8	12	90	43

Model	Dimensions of Air Supplying Part										Dimensions of Switch Attaching Part					
	P1	P2	P3	P4	P5	P6	P7 NOK(standard)	P8	P9	P10	Proximity Switch			Reed Switch		
											S1	S2	S3	S4	S5	S6
KPH073-2	M5	24	25.5	7.5	M3	12	S4	φ 3	φ 6.6	1	M4	18	13.5	3.6	5.2	6.5
KPH088-2	M5	31	28.5	8	M3	15	S4	φ 3	φ 6.6	1	M4	18	17	3.6	5.2	6.5
KPH108-2	M5	38	32	8.5	M4	18	S6	φ 4	φ 8.3	1	M4	18	19.5	3.6	5.2	6.5
KPH133-2	G1/8	48	35	11	M5	21	S8	φ 5	φ 10.3	1	M4	18	24	3.6	5.2	6.5

Option

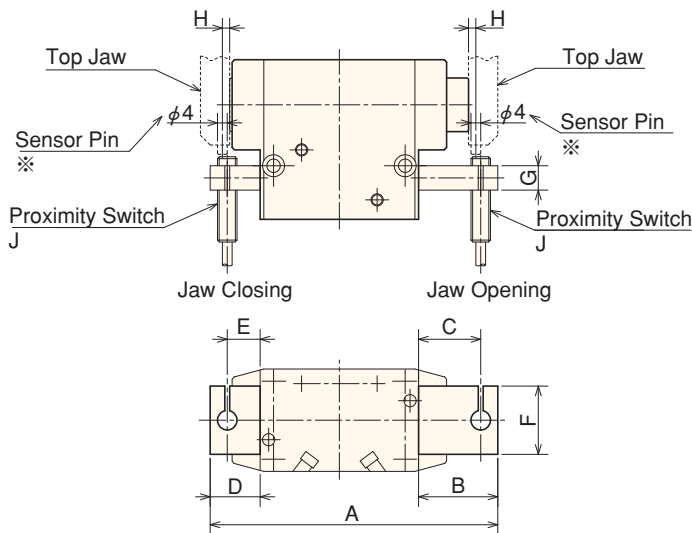
Safety Device



Safety Device

Model	Specifications				Outline Dimensions		
	Measured Distance L (mm)	Gripping Force Spring Force (N)	Net Weight (kg)	Air Pressure (Mpa)	A	B	C
KPH073-2A/C	10	64~96	0.51	0.4~0.8	69	13	φ 26
KPH088-2A/C	10	92~176	0.77		89	23.5	φ 34
KPH108-2A/C	20	158~264	1.55		105	27.5	φ 42
KPH133-2A/C	20	256~406	2.5		120	30	φ 52

Proximity Switch Bracket



Attaching Proximity Switch

Model	Outline Dimensions								
	A	B	C	D	E	F	G	H	J
KPH073-2※B	101	29.5	22.5	19.5	12.5	28	10	3	M8
KPH088-2※B	118	32.5	25.5	20.5	13.5	28	10	3	M8
KPH108-2※B	140	36	29	22	15	28	10	3	M8
KPH133-2※B	167	39	32	23	16	28	10	3	M8

※Sens or pins will be prepared by the customer.