



**PROFESSIONAL**  
HIGH QUALITY PNEUMATIC FITTINGS



Wenzhou Qiaosen Pneumatic Co., Ltd  
Pneumatic Fittings

## 气缸套件 Assembly Kits For Pneumatic Cylinder

DNC方形管/Square Aluminum Tube



### 规格 Specification

缸径/Bore Size:  
Φ32, Φ40, Φ50,  
Φ63, Φ80, Φ100, Φ125

SI米字形管/Mickey mouse Aluminum Tube



### 规格 Specification

缸径/Bore Size:  
Φ32, Φ40, Φ50,  
Φ63, Φ80, Φ100,  
Φ125, Φ160, Φ200

SC, MAL圆形管/Round Aluminum Tube



### 规格 Specification

缸径/Bore Size:  
Φ32, Φ40, Φ50,  
Φ63, Φ80, Φ100, Φ125  
Φ160, Φ200, Φ250, Φ320

活塞杆/Piston rod



### 规格 Specification

缸径/Bore Size:  
Φ6, 8, 10, 12, 16, 20, 25,  
32, 40, 45, 50, 60, 70等/etc.

我们公司可以根据客户的要求提供不同直径的活塞杆，包括不锈钢材质。  
Our company can provide different diameters piston rods including stainless steel material's according to customers requirement.

## 开关型号编码说明使用说明及注意事项

### ● 订购码 Ordering Code

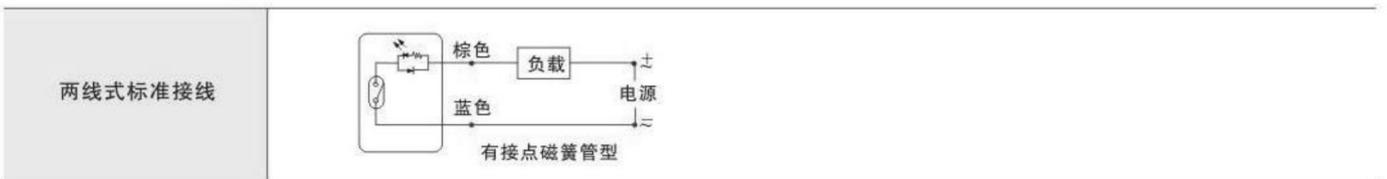


无标示:电线长度为1M(标准长度)  
02:电线长度为2M

05:电线长度为5M  
QD8: M8快速接头(标准线长为015M)  
无标示:标准规格常开型(N. O)  
A:300mA  
B:常闭型(N. C)  
F:无接点FET电流输出  
H:高感度  
L:低感度  
X:无标示灯(大电流输出)  
R:有接点三极管NPN输出  
P:无接点三极管NPN输出  
Rd:三线式两用磁簧管型(NPN/PNP)  
01  
03  
:  
HT:耐高温

请一定要注意! 在使用磁感应开关时, 不可超过产品的各项参数规格限制

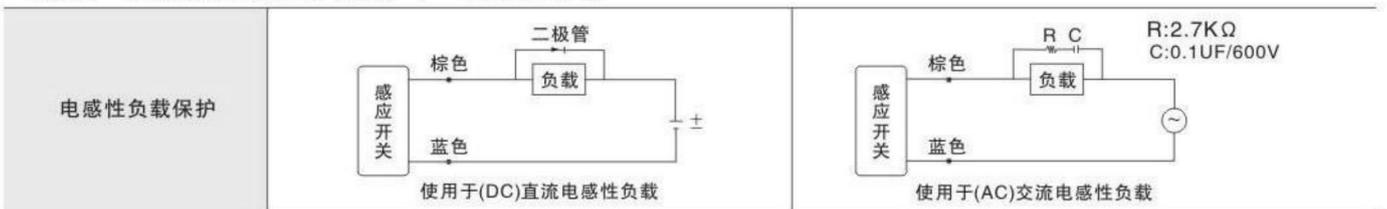
- 在使用二线式的感应开关时, 一定要接负载(LOAD)后, 才可以正常使用, 否则导致感应开关烧坏。
- 在使用(DC)直流电源时, 棕色线要接在正电位(+), 蓝色线接在负电位上(-), 否则感应开关的指示灯不亮。但感应开关仍可以正常工作。若有上述的情形时, 并不会损坏开关, 只要将开关的两条接线对调, 指示灯即可从正常工作。



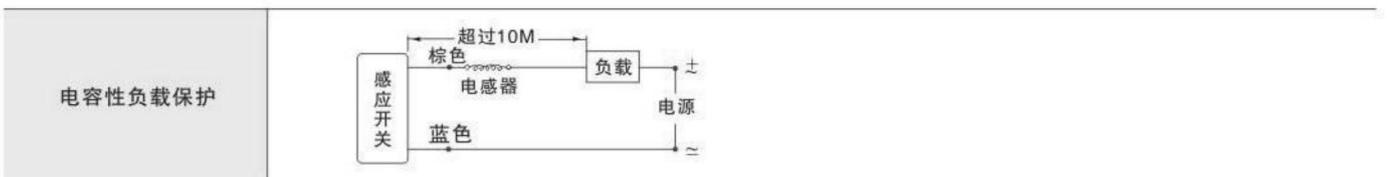
- 在使用三线式的无触点型式开关时, 一定要使用(DC)直流电源, 并注意接线方式。
- 棕色线要接在高电位(+), 蓝色线要接在低电位(-), 黑色线串接在负载上。
- 黑色线一定要串接负载后, 才可以使用。黑色线若接到电源时, 有可能会导致感应开关损坏。



- 在使用负载为感性负载(如继电器、电磁阀)时, 请在负载端并接保护元件, 如此可延长感应开关的寿命。
- 若接到直流(DC)直流电感性负载时, 请并接一个二极管在负载上(方向如下图), 且二极管的反向崩溃电压大于电源电压。
- 若接到(AC)交流电感性负载时, 请并接一个R-C回路在负载上。



- 使用负载为电容性负载时, 或电线长度超过10M时, 请在尽量靠近开关处, 串接一个电感(470uH~4000uH), 如此可延长感应开关的寿命。



- 使用磁感应开关时, 应尽量远离强磁场或周边有导磁金属的环境, 以避免干扰。

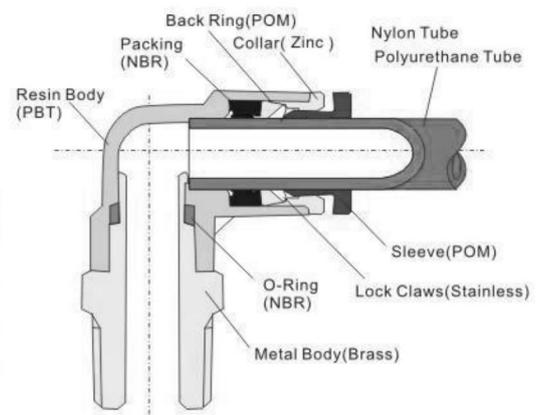
## Features

- Convenient One touch fittings provide instant tubing connections
- Elliptical release ring facilitates pneumatic installations in confined spaces
- Light manual pressure on the elliptical release ring is all that is required to instantly disconnect each tube no special tools required.
- Nickel-plated brass threaded bodies ensures anti-corrosion and anti-contamination.
- All NPT & R(BSPT) thread are pre-coated with Teflon sealant and require no additional sealing.
- Most all are models available in inch and metric size.

## Specifications

Fluid Type	Air ( No other types of gases or liquids )	
Working Pressure Range	0~150PSI	0~9.9kgf/cm <sup>2</sup> (0~990KPa)
Negative Pressure	-29.5 in Hg	-750mm Hg(10 Torr)
Working Temperature	32~140°F	0-60°C
Recommended tube material	Nylon Or Polyurethane	

## Construction



## Products Code System



- ① Model type  
② Tube outer dia

	METRIC SIZE							INCH SIZE						
<b>Code</b>	04	06	08	10	12	14	16	1/8	5/32	3/16	1/4	5/16	3/8	1/2
<b>Dia.</b>	4mm	6mm	8mm	10mm	12mm	14mm	16mm	1/8inch	5/32inch	3/16inch	1/4inch	5/16inch	3/8inch	1/2inch

## ③ Thread Size

METRIC SIZE									
<b>Code</b>	M5	M6	M8	M10	M12	M12A	M14	M16	M20
<b>Dia.</b>	M5X0.8	M6X1	M8X1	M10X1	M12X1.25	M12X1.5	M14X1.5	M16X1.5	M20X1.5

55° Taper Pipe Thread (BSPT)					G-Thread(BSPP)				
<b>Code</b>	01	02	03	04	06	G01	G02	G03	G04
<b>Dia.</b>	R1/8	R1/4	R3/8	R1/2	R3/4	G1/8	G1/4	G3/8	G1/2

American Standard Taper Pipe Thread (NPT)							
<b>Code</b>	U10	N00	N01	N02	N03	N04	N06
<b>Dia.</b>	10-32UNF	NPT1/16	NPT1/8	NPT1/4	NPT3/8	NPT1/2	NPT3/4



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PC04-M5	PC08-04	PC1/8-01	PC5/16-04	PC1/8-U10	PC1/4-N03
PC04-M6	PC10-01	PC1/8-02	PC3/8-01	PC1/8-N01	PC5/16-N01
PC04-01	PC10-02	PC5/32-01	PC3/8-02	PC1/8-N02	PC5/16-N02
PC04-02	PC10-03	PC5/32-02	PC3/8-03	PC5/32-U10	PC5/16-N03
PC04-03	PC10-04	PC3/16-01	PC3/8-04	PC5/32-N01	PC3/8-N01
PC06-M5	PC12-01	PC3/16-02	PC1/2-02	PC5/32-N02	PC3/8-N02
PC06-M6	PC12-02	PC3/16-03	PC1/2-03	PC3/16-U10	PC3/8-N03
PC06-01	PC12-03	PC1/4-01	PC1/2-04	PC3/16-N01	PC3/8-N04
PC06-02	PC12-04	PC1/4-02		PC3/16-N02	PC1/2-N02
PC06-03	PC14-03	PC1/4-03		PC3/16-N03	PC1/2-N03
PC08-01	PC14-04	PC5/16-01		PC1/4-U10	PC1/2-N04
PC08-02	PC16-03	PC5/16-02		PC1/4-N01	
PC08-03	PC16-04	PC5/16-03		PC1/4-N02	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
POC04-M5	POC08-04	POC1/8-01	POC5/16-04	POC1/8-U10	POC1/4-N03
POC04-M6	POC10-01	POC1/8-02	POC3/8-01	POC1/8-N01	POC5/16-N01
POC04-01	POC10-02	POC5/32-01	POC3/8-02	POC1/8-N02	POC5/16-N02
POC04-02	POC10-03	POC5/32-02	POC3/8-03	POC5/32-U10	POC5/16-N03
POC04-03	POC10-04	POC3/16-01	POC3/8-04	POC5/32-N01	POC3/8-N01
POC06-M5	POC12-01	POC3/16-02	POC1/2-02	POC5/32-N02	POC3/8-N02
POC06-M6	POC12-02	POC3/16-03	POC1/2-03	POC3/16-U10	POC3/8-N03
POC06-01	POC12-03	POC1/4-01	POC1/2-04	POC3/16-N01	POC3/8-N04
POC06-02	POC12-04	POC1/4-02		POC3/16-N02	POC1/2-N02
POC06-03	POC14-03	POC1/4-03		POC3/16-N03	POC1/2-N03
POC08-01	POC14-04	POC5/16-01		POC1/4-U10	POC1/2-N04
POC08-02	POC16-03	POC5/16-02		POC1/4-N01	
POC08-03	POC16-04	POC5/16-03		POC1/4-N02	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PCF04-01	PCF10-04	PCF1/8-01	PCF5/16-04	PCF1/8-N01	PCF5/16-N04
PCF04-02	PCF12-01	PCF1/8-02	PCF3/8-01	PCF1/8-N02	PCF3/8-N01
PCF04-03	PCF12-02	PCF5/32-01	PCF3/8-02	PCF5/32-N01	PCF3/8-N02
PCF06-01	PCF12-03	PCF5/32-02	PCF3/8-03	PCF5/32-N02	PCF3/8-N03
PCF06-02	PCF12-04	PCF3/16-01	PCF3/8-04	PCF3/16-N01	PCF3/8-N04
PCF06-03	PCF14-03	PCF3/16-02	PCF1/2-02	PCF3/16-N02	PCF1/2-N02
PCF08-01	PCF14-04	PCF3/16-03	PCF1/2-03	PCF3/16-N03	PCF1/2-N03
PCF08-02	PCF16-03	PCF1/4-01	PCF1/2-04	PCF1/4-N01	PCF1/2-N04
PCF08-03	PCF16-04	PCF1/4-02		PCF1/4-N02	
PCF08-04		PCF1/4-03		PCF1/4-N03	
PCF10-01		PCF5/16-01		PCF5/16-N01	
PCF10-02		PCF5/16-02		PCF5/16-N02	
PCF10-03		PCF5/16-03		PCF5/16-N03	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PL04-M5	PL08-04	PL1/8-01	PL5/16-04	PL1/8-U10	PL1/4-N03
PL04-M6	PL10-01	PL1/8-02	PL3/8-01	PL1/8-N01	PL5/16-N01
PL04-01	PL10-02	PL5/32-01	PL3/8-02	PL1/8-N02	PL5/16-N02
PL04-02	PL10-03	PL5/32-02	PL3/8-0	PL5/32-U10	PL5/16-N03
PL04-03	PL10-04	PL3/16-01		PL5/32-N01	PL3/8-N01
PL06-M5	PL12-01	PL3/16-02		PL5/32-N02	PL3/8-N02
PL06-M6	PL12-02	PL3/16-03		PL3/16-U10	PL3/8-N03
PL06-01	PL12-03	PL1/4-01		PL3/16-N01	PL3/8-N04
PL06-02	PL12-04	PL1/4-02		PL3/16-N02	PL1/2-N02
PL06-03	PL14-03	PL1/4-03		PL3/16-N03	PL1/2-N03
PL08-01	PL14-04	PL5/16-01		PL1/4-U10	PL1/2-N04
PL08-02	PL16-03	PL5/16-02		PL1/4-N01	
PL08-03	PL16-04	PL5/16-03		PL1/4-N02	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PLF04-01	PLF10-04	PLF1/8-01	PLF5/16-04	PLF1/8-N01	PLF5/16-N04
PLF04-02	PLF12-01	PLF1/8-02	PLF3/8-01	PLF1/8-N02	PLF3/8-N01
PLF04-03	PLF12-02	PLF5/32-01	PLF3/8-02	PLF5/32-N01	PLF3/8-N02
PLF06-01	PLF12-03	PLF5/32-02	PLF3/8-03	PLF5/32-N02	PLF3/8-N03
PLF06-02	PLF12-04	PLF3/16-01	PLF3/8-04	PLF3/16-N01	PLF3/8-N04
PLF06-03	PLF14-03	PLF3/16-02	PLF1/2-02	PLF3/16-N02	PLF1/2-N02
PLF08-01	PLF14-04	PLF3/16-03	PLF1/2-03	PLF3/16-N03	PLF1/2-N03
PLF08-02	PLF16-03	PLF1/4-01	PLF1/2-04	PLF1/4-N01	PLF1/2-N04
PLF08-03	PLF16-04	PLF1/4-02		PLF1/4-N02	
PLF08-04		PLF1/4-03		PLF1/4-N03	
PLF10-01		PLF5/16-01		PLF5/16-N01	
PLF10-02		PLF5/16-02		PLF5/16-N02	
PLF10-03		PLF5/16-03		PLF5/16-N03	

## MALE 45° ELBOW



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PLH04-M5	PLH08-03	PLH1/8-01	PLH3/8-02	PLH1/8-U10	PLH5/16-N03
PLH04-M6	PLH08-04	PLH1/8-02	PLH3/8-03	PLH1/8-N01	PLH3/8-N01
PLH04-01	PLH10-01	PLH5/32-01	PLH3/8-04	PLH1/8-N02	PLH3/8-N02
PLH04-02	PLH10-02	PLH5/32-02	PLH1/2-02	PLH5/32-U10	PLH3/8-N03
PLH04-03	PLH10-03	PLH1/4-01	PLH1/2-03	PLH5/32-N01	PLH3/8-N04
PLH06-M5	PLH10-04	PLH1/4-02	PLH1/2-04	PLH5/32-N02	PLH1/2-N02
PLH06-M6	PLH12-01	PLH1/4-03		PLH1/4-U10	PLH1/2-N03
PLH06-01	PLH12-02	PLH5/16-01		PLH1/4-N01	PLH1/2-N04
PLH06-02	PLH12-03	PLH5/16-02		PLH1/4-N02	
PLH06-03	PLH12-04	PLH5/16-03		PLH1/4-N03	
PLH08-01		PLH5/16-04		PLH5/16-N01	
PLH08-02		PLH3/8-01		PLH5/16-N02	

## EXTENDED MALE ELBOW



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PLL04-M5	PLL08-04	PLL1/8-01	PLL5/16-04	PLL1/8-U10	PLL1/4-N03
PLL04-M6	PLL10-01	PLL1/8-02	PLL3/8-01	PLL1/8-N01	PLL5/16-N01
PLL04-01	PLL10-02	PLL5/32-01	PLL3/8-02	PLL1/8-N02	PLL5/16-N02
PLL04-02	PLL10-03	PLL5/32-02	PLL3/8-03	PLL5/32-U10	PLL5/16-N03
PLL04-03	PLL10-04	PLL3/16-01	PLL3/8-04	PLL5/32-N01	PLL3/8-N01
PLL06-M5	PLL12-01	PLL3/16-02	PLL1/2-02	PLL5/32-N02	PLL3/8-N02
PLL06-M6	PLL12-02	PLL3/16-03	PLL1/2-03	PLL3/16-U10	PLL3/8-N03
PLL06-01	PLL12-03	PLL1/4-01	PLL1/2-04	PLL3/16-N01	PLL3/8-N04
PLL06-02	PLL12-04	PLL1/4-02		PLL3/16-N02	PLL1/2-N02
PLL06-03	PLL14-03	PLL1/4-03		PLL3/16-N03	PLL1/2-N03
PLL08-01	PLL14-04	PLL5/16-01		PLL1/4-U10	PLL1/2-N04
PLL08-02	PLL16-03	PLL5/16-02		PLL1/4-N01	
PLL08-03	PLL16-04	PLL5/16-03		PLL1/4-N02	

## MALE BRANCH TEE



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PT04-M5	PT08-04	PT1/8-01	PT5/16-04	PT1/8-U10	PT1/4-N03
PT04-M6	PT10-01	PT1/8-02	PT3/8-01	PT1/8-N01	PT5/16-N01
PT04-01	PT10-02	PT5/32-01	PT3/8-02	PT1/8-N02	PT5/16-N02
PT04-02	PT10-03	PT5/32-02	PT3/8-03	PT5/32-U10	PT5/16-N03
PT04-03	PT10-04	PT3/16-01	PT3/8-04	PT5/32-N01	PT3/8-N01
PT06-M5	PT12-01	PT3/16-02	PT1/2-02	PT5/32-N02	PT3/8-N02
PT06-M6	PT12-02	PT3/16-03	PT1/2-03	PT3/16-U10	PT3/8-N03
PT06-01	PT12-03	PT1/4-01	PT1/2-04	PT3/16-N01	PT3/8-N04
PT06-02	PT12-04	PT1/4-02		PT3/16-N02	PT1/2-N02
PT06-03	PT14-03	PT1/4-03		PT3/16-N03	PT1/2-N03
PT08-01	PT14-04	PT5/16-01		PT1/4-U10	PT1/2-N04
PT08-02	PT16-03	PT5/16-02		PT1/4-N01	
PT08-03	PT16-04	PT5/16-03		PT1/4-N02	

## FEMALE BRANCH TEE



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PTF04-01	PTF10-04	PTF1/8-01	PTF5/16-04	PTF1/8-N01	PTF5/16-N04
PTF04-02	PTF12-01	PTF1/8-02	PTF3/8-01	PTF1/8-N02	PTF3/8-N01
PTF04-03	PTF12-02	PTF5/32-01	PTF3/8-02	PTF5/32-N01	PTF3/8-N02
PTF06-01	PTF12-03	PTF5/32-02	PTF3/8-03	PTF5/32-N02	PTF3/8-N03
PTF06-02	PTF12-04	PTF3/16-01	PTF3/8-04	PTF3/16-N01	PTF3/8-N04
PTF06-03	PTF14-03	PTF3/16-02	PTF1/2-02	PTF3/16-N02	PTF1/2-N02
PTF08-01	PTF14-04	PTF3/16-03	PTF1/2-03	PTF3/16-N03	PTF1/2-N03
PTF08-02	PTF16-03	PTF1/4-01	PTF1/2-04	PTF1/4-N01	PTF1/2-N04
PTF08-03	PTF16-04	PTF1/4-02		PTF1/4-N02	
PTF08-04		PTF1/4-03		PTF1/4-N03	
PTF10-01		PTF5/16-01		PTF5/16-N01	
PTF10-02		PTF5/16-02		PTF5/16-N02	
PTF10-03		PTF5/16-03		PTF5/16-N03	

## MALE RUN TEE



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PST04-M5	PST08-04	PST1/8-01	PST5/16-04	PST1/8-U10	PST1/4-N03
PST04-M6	PST10-01	PST1/8-02	PST3/8-01	PST1/8-N01	PST5/16-N01
PST04-01	PST10-02	PST5/32-01	PST3/8-02	PST1/8-N02	PST5/16-N02
PST04-02	PST10-03	PST5/32-02	PST3/8-03	PST5/32-U10	PST5/16-N03
PST04-03	PST10-04	PST3/16-01	PST3/8-04	PST5/32-N01	PST3/8-N01
PST06-M5	PST12-01	PST3/16-02	PST1/2-02	PST5/32-N02	PST3/8-N02
PST06-M6	PST12-02	PST3/16-03	PST1/2-03	PST3/16-U10	PST3/8-N03
PST06-01	PST12-03	PST1/4-01	PST1/2-04	PST3/16-N01	PST3/8-N04
PST06-02	PST12-04	PST1/4-02		PST3/16-N02	PST1/2-N02
PST06-03	PST14-03	PST1/4-03		PST3/16-N03	PST1/2-N03
PST08-01	PST14-04	PST5/16-01		PST1/4-U10	PST1/2-N04
PST08-02	PST16-03	PST5/16-02		PST1/4-N01	
PST08-03	PST16-04	PST5/16-03		PST1/4-N02	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PWT04-M5	PWT08-04	PWT1/8-01	PWT5/16-04	PWT1/8-U10	PWT1/4-N03
PWT04-M6	PWT10-01	PWT1/8-02	PWT3/8-01	PWT1/8-N01	PWT5/16-N01
PWT04-01	PWT10-02	PWT5/32-01	PWT3/8-02	PWT1/8-N02	PWT5/16-N02
PWT04-02	PWT10-03	PWT5/32-02	PWT3/8-03	PWT5/32-U10	PWT5/16-N03
PWT04-03	PWT10-04	PWT3/16-01	PWT3/8-04	PWT5/32-N01	PWT3/8-N01
PWT06-M5	PWT12-01	PWT3/16-02	PWT1/2-02	PWT5/32-N02	PWT3/8-N02
PWT06-M6	PWT12-02	PWT3/16-03	PWT1/2-03	PWT3/16-U10	PWT3/8-N03
PWT06-01	PWT12-03	PWT1/4-01	PWT1/2-04	PWT3/16-N01	PWT3/8-N04
PWT06-02	PWT12-04	PWT1/4-02		PWT3/16-N02	PWT1/2-N02
PWT06-03	PWT14-03	PWT1/4-03		PWT3/16-N03	PWT1/2-N03
PWT08-01	PWT14-04	PWT5/16-01		PWT1/4-U10	PWT1/2-N04
PWT08-02	PWT16-03	PWT5/16-02		PWT1/4-N01	
PWT08-03	PWT16-04	PWT5/16-03		PWT1/4-N02	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PH04-M5	PH08-04	PH1/8-01	PH5/16-04	PH1/8-U10	PH1/4-N03
PH04-M6	PH10-01	PH1/8-02	PH3/8-01	PH1/8-N01	PH5/16-N01
PH04-01	PH10-02	PH5/32-01	PH3/8-02	PH1/8-N02	PH5/16-N02
PH04-02	PH10-03	PH5/32-02	PH3/8-03	PH5/32-U10	PH5/16-N03
PH04-03	PH10-04	PH3/16-01	PH3/8-04	PH5/32-N01	PH3/8-N01
PH06-M5	PH12-01	PH3/16-02	PH1/2-02	PH5/32-N02	PH3/8-N02
PH06-M6	PH12-02	PH3/16-03	PH1/2-03	PH3/16-U10	PH3/8-N03
PH06-01	PH12-03	PH1/4-01	PH1/2-04	PH3/16-N01	PH3/8-N04
PH06-02	PH12-04	PH1/4-02		PH3/16-N02	PH1/2-N02
PH06-03	PH14-03	PH1/4-03		PH3/16-N03	PH1/2-N03
PH08-01	PH14-04	PH5/16-01		PH1/4-U10	PH1/2-N04
PH08-02	PH16-03	PH5/16-02		PH1/4-N01	
PH08-03	PH16-04	PH5/16-03		PH1/4-N02	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PHF04-01	PHF10-04	PHF1/8-01	PHF5/16-04	PHF1/8-N01	PHF5/16-N04
PHF04-02	PHF12-01	PHF1/8-02	PHF3/8-01	PHF1/8-N02	PHF3/8-N01
PHF04-03	PHF12-02	PHF5/32-01	PHF3/8-02	PHF5/32-N01	PHF3/8-N02
PHF06-01	PHF12-03	PHF5/32-02	PHF3/8-03	PHF5/32-N02	PHF3/8-N03
PHF06-02	PHF12-04	PHF3/16-01	PHF3/8-04	PHF3/16-N01	PHF3/8-N04
PHF06-03	PHF14-03	PHF3/16-02	PHF1/2-02	PHF3/16-N02	PHF1/2-N02
PHF08-01	PHF14-04	PHF3/16-03	PHF1/2-03	PHF3/16-N03	PHF1/2-N03
PHF08-02	PHF16-03	PHF1/4-01	PHF1/2-04	PHF1/4-N01	PHF1/2-N04
PHF08-03	PHF16-04	PHF1/4-02		PHF1/4-N02	
PHF08-04		PHF1/4-03		PHF1/4-N03	
PHF10-01		PHF5/16-01		PHF5/16-N01	
PHF10-02		PHF5/16-02		PHF5/16-N02	
PHF10-03		PHF5/16-03		PHF5/16-N03	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PMF04-01	PMF10-04	PMF1/8-01	PMF5/16-04	PMF1/8-N01	PMF5/16-N04
PMF04-02	PMF12-01	PMF1/8-02	PMF3/8-01	PMF1/8-N02	PMF3/8-N01
PMF04-03	PMF12-02	PMF5/32-01	PMF3/8-02	PMF5/32-N01	PMF3/8-N02
PMF06-01	PMF12-03	PMF5/32-02	PMF3/8-03	PMF5/32-N02	PMF3/8-N03
PMF06-02	PMF12-04	PMF3/16-01	PMF3/8-04	PMF3/16-N01	PMF3/8-N04
PMF06-03	PMF14-03	PMF3/16-02	PMF1/2-02	PMF3/16-N02	PMF1/2-N02
PMF08-01	PMF14-04	PMF3/16-03	PMF1/2-03	PMF3/16-N03	PMF1/2-N03
PMF08-02	PMF16-03	PMF1/4-01	PMF1/2-04	PMF1/4-N01	PMF1/2-N04
PMF08-03	PMF16-04	PMF1/4-02		PMF1/4-N02	
PMF08-04		PMF1/4-03		PMF1/4-N03	
PMF10-01		PMF5/16-01		PMF5/16-N01	
PMF10-02		PMF5/16-02		PMF5/16-N02	
PMF10-03		PMF5/16-03		PMF5/16-N03	



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
PKB04-M5	PKB06-01	PKB5/32-01	PKB5/16-01	PKB5/32-U10	PKB1/4-N02
PKB04-M6	PKB06-02	PKB5/32-02	PKB5/16-02	PKB5/32-N01	PKB1/4-N03
PKB04-01	PKB06-03	PKB1/4-01	PKB5/16-03	PKB5/32-N02	PKB5/16-N01
PKB04-02	PKB08-01	PKB1/4-02	PKB5/16-04	PKB1/4-U10	PKB5/16-N02
PKB04-03	PKB08-02	PKB1/4-03		PKB1/4-N01	PKB5/16-N03
PKB06-M5	PKB08-03				
PKB06-M6	PKB08-04				

**MALE TRIPLE BRANCH REDUCER**



$\phi D_1$  **PKD**  
 $\phi D_2$  T

Tube(Metric) - Thread(R)	Tube(Inch) - Thread(R)
PKD 06-04-01	PKD1/4-5/32-01
PKD 08-04-02	PKD5/16-5/32-02
PKD 08-06-02	PKD5/16-1/4-02
PKD 10-08-03	PKD3/8-5/16-03

Tube(Inch) - Thread(NPT)
PKD1/4-5/32-N01
PKD5/16-5/32-N02
PKD5/16-1/4-N02
PKD3/8-5/16-N03

**UNION STRAIGHT**



$\phi D$  **PUC**

Tube(Metric)	Tube(Inch)
PUC 04	PUC 1/8
PUC 05	PUC 5/32
PUC 06	PUC 3/16
PUC 08	PUC 1/4
PUC 10	PUC 5/16
PUC 12	PUC 3/8
PUC 14	PUC 1/2
PUC 16	

**UNION ELBOW**



$\phi D$  **PUL**  $\phi D$

Tube(Metric)	Tube(Inch)
PUL 04	PUL 1/8
PUL 05	PUL 5/32
PUL 06	PUL 3/16
PUL 08	PUL 1/4
PUL 10	PUL 5/16
PUL 12	PUL 3/8
PUL 14	PUL 1/2
PUL 16	

**UNION TEE**



$\phi D$  **PUT**  $\phi D$

Tube(Metric)	Tube(Inch)
PUT 04	PUT 1/8
PUT 05	PUT 5/32
PUT 06	PUT 3/16
PUT 08	PUT 1/4
PUT 10	PUT 5/16
PUT 12	PUT 3/8
PUT 14	PUT 1/2
PUT 16	

**UNION Y**



$\phi D$  **PY**  $\phi D$

Tube(Metric)	Tube(Inch)
PY 04	PY 1/8
PY 05	PY 5/32
PY 06	PY 3/16
PY 08	PY 1/4
PY 10	PY 5/16
PY 12	PY 3/8
PY 14	PY 1/2
PY 16	

**UNION CROSS**



$\phi D$  **PZA**  $\phi D$

Tube(Metric)	Tube(Inch)
PZA 04	PZA 1/8
PZA 06	PZA 5/32
PZA 08	PZA 3/16
PZA 10	PZA 1/4
PZA 12	PZA 5/16
	PZA 3/8
	PZA 1/2

**BULKHEAD UNION**



$\phi D$  **PMM**  $\phi D$

Tube(Metric)	Tube(Inch)
PMM 04	PMM 1/8
PMM 06	PMM 5/32
PMM 08	PMM 3/16
PMM 10	PMM 1/4
PMM 12	PMM 5/16
PMM 16	PMM 3/8
	PMM 1/2

**BULKHEAD ELBOW**



$\phi D$  **PLM**  $\phi D$

Tube(Metric)	Tube(Inch)
PLM 04	PLM 1/8
PLM 06	PLM 5/32
PLM 08	PLM 3/16
PLM 10	PLM 1/4
PLM 12	PLM 5/16
PLM 16	PLM 3/8
	PLM 1/2

**TRIPLE BRANCH UNION**



$\phi D$  **PK**  $\phi D$

Tube(Metric)	Tube(Inch)
PK 04	PK 5/32
PK 06	PK 1/4
PK 08	PK 5/16

**UNION REDUCER**



$\phi D_1$  **PG**  $\phi D_2$

Tube(Metric)	Tube(Inch)
PG06-04	PG1/4-5/32
PG08-04	PG3/16-5/32
PG08-06	PG5/16-1/4
PG10-06	PG3/8-1/4
PG10-08	PG3/8-5/16
PG12-08	PG1/2-3/8
PG12-10	
PG16-12	

**UNION Y REDUCER**



$\phi D_2$  **PW**  $\phi D_1$

Tube(Metric)	Tube(Inch)
PW06-04	PW1/4-5/32
PW08-04	PW3/16-5/32
PW08-06	PW5/16-1/4
PW10-06	PW3/8-1/4
PW10-08	PW3/8-5/16
PW12-08	PW1/2-3/8
PW12-10	

**UNION TEE REDUCER**



$\phi D_1$  **PTG**  $\phi D_2$   $\phi D_1$

Tube(Metric)	Tube(Inch)
PTG06-04	PTG1/4-5/32
PTG08-04	PTG3/16-5/32
PTG08-06	PTG5/16-1/4
PTG10-06	PTG3/8-1/4
PTG10-08	PTG3/8-5/16
PTG12-08	PTG1/2-3/8
PTG12-10	
PTG16-12	

**UNION TRIPLE BRANCH REDUCER**



$\phi D_1$  **PKG**  $\phi D_2$   $\phi D_1$

Tube(Metric)	Tube(Inch)
PKG06-04	PKG1/4-5/32
PKG08-04	PKG5/16-5/32
PKG08-06	PKG5/16-1/4
PKG10-06	PKG3/8-1/4
PKG10-08	PKG3/8-5/16



Tube(Metric)	Tube(Inch)
PP 04	PP 1/8
PP 06	PP 5/32
PP 08	PP 3/16
PP 10	PP 1/4
PP 12	PP 5/16
	PP 3/8
	PP 1/2



Tube(Metric)	Tube(Inch)
PGJ06-04	PGJ1/4-5/32
PGJ08-04	PGJ5/16-5/32
PGJ08-06	PGJ5/16-1/4
PGJ10-06	PGJ3/8-1/4
PGJ10-08	PGJ3/8-5/16
PGJ12-06	PGJ1/2-1/4
PGJ12-08	
PGJ12-10	



Tube(Metric)	Tube(Inch)
PLJ 04	PLJ 1/8
PLJ 06	PLJ 5/32
PLJ 08	PLJ 3/16
PLJ 10	PLJ 1/4
PLJ 12	PLJ 5/16
PLJ 16	PLJ 3/8
	PLJ 1/2



Tube(Metric)	Tube(Inch)
PLHJ 04	PLHJ 1/8
PLHJ 06	PLHJ 5/32
PLHJ 08	PLHJ 1/4
PLHJ 10	PLHJ 5/16
PLHJ 12	PLHJ 3/8
	PLHJ 1/2



Tube(Metric)	Tube(Inch)
PYJ 04	PYJ 1/8
PYJ 06	PYJ 5/32
PYJ 08	PYJ 3/16
PYJ 10	PYJ 1/4
PYJ 12	PYJ 5/16
	PYJ 3/8
	PYJ



Tube(Metric)	Tube(Inch)
PKJ 04	PKJ 5/32
PKJ 06	PKJ 1/4
PKJ 08	PKJ 5/16



Tube(Metric)	Tube(Inch)
PLGJ06-04	PLGJ1/4-5/32
PLGJ08-04	PLGJ3/16-5/32
PLGJ08-06	PLGJ5/16-1/4
PLGJ10-06	PLGJ3/8-1/4
PLGJ10-08	PLGJ3/8-5/16
PLGJ12-08	PLGJ1/2-3/8
PLGJ12-10	
PLGJ16-12	



Tube(Metric)	Tube(Inch)
PLHGJ06-04	PLHGJ1/4-5/32
PLHGJ08-04	PLHGJ3/16-5/32
PLHGJ08-06	PLHGJ5/16-1/4
PLHGJ10-06	PLHGJ3/8-1/4
PLHGJ10-08	PLHGJ3/8-5/16
PLHGJ12-08	PLHGJ1/2-3/8
PLHGJ12-10	
PLHGJ16-12	



Tube(Metric)	Tube(Inch)
PYGJ06-04	PYGJ1/4-5/32
PYGJ08-04	PYGJ3/16-5/32
PYGJ08-06	PYGJ5/16-1/4
PYGJ10-06	PYGJ3/8-1/4
PYGJ10-08	PYGJ3/8-5/16
PYGJ12-08	PYGJ1/2-3/8
PYGJ12-10	

## Fittings With G Thread (O-Ring)



Tube(Metric) - Thread(G)	Tube(Metric) - Thread(G)
PC04-G01	PC10-G02
PC04-G02	PC10-G03
PC04-G03	PC10-G04
PC06-G01	PC12-G02
PC06-G02	PC12-G03
PC06-G03	PC12-G04
PC08-G01	PC14-G03
PC08-G02	PC14-G04
PC08-G03	PC16-G03
PC08-G04	PC16-G04
PC10-G01	



Tube(Metric) - Thread(G)	Tube(Metric) - Thread(G)
POC04-G01	POC10-G02
POC04-G02	POC10-G03
POC04-G03	POC10-G04
POC06-G01	POC12-G02
POC06-G02	POC12-G03
POC06-G03	POC12-G04
POC08-G01	POC14-G03
POC08-G02	POC14-G04
POC08-G03	POC16-G03
POC08-G04	POC16-G04
POC10-G01	

### FEMALE STRAIGHT



Tube(Metric) - Thread(G)	
PCF04-G01	PCF10-G02
PCF04-G02	PCF10-G03
PCF04-G03	PCF10-G04
PCF06-G01	PCF12-G02
PCF06-G02	PCF12-G03
PCF06-G03	PCF12-G04
PCF08-G01	PCF14-G03
PCF08-G02	PCF14-G04
PCF08-G03	PCF16-G03
PCF08-G04	PCF16-G04
PCF10-G01	

### MALE ELBOW



Tube(Metric) - Thread(G)	
PL04-G01	PL10-G02
PL04-G02	PL10-G03
PL04-G03	PL10-G04
PL06-G01	PL12-G02
PL06-G02	PL12-G03
PL06-G03	PL12-G04
PL08-G01	PL14-G03
PL08-G02	PL14-G04
PL08-G03	PL16-G03
PL08-G04	PL16-G04
PL10-G01	

### FEMALE ELBOW



Tube(Metric) - Thread(G)	
PLF04-G01	PLF10-G02
PLF04-G02	PLF10-G03
PLF04-G03	PLF10-G04
PLF06-G01	PLF12-G02
PLF06-G02	PLF12-G03
PLF06-G03	PLF12-G04
PLF08-G01	PLF14-G03
PLF08-G02	PLF14-G04
PLF08-G03	PLF16-G03
PLF08-G04	PLF16-G04
PLF10-G01	

### MALE 45° ELBOW



Tube(Metric) - Thread(G)	
PLH04-G01	PLH10-G02
PLH04-G02	PLH10-G03
PLH04-G03	PLH10-G04
PLH06-G01	PLH12-G02
PLH06-G02	PLH12-G03
PLH06-G03	PLH12-G04
PLH08-G01	
PLH08-G02	
PLH08-G03	
PLH08-G04	
PLH10-G01	

### EXTENDED MALE ELBOW



Tube(Metric) - Thread(G)	
PLL04-G01	PLL10-G02
PLL04-G02	PLL10-G03
PLL04-G03	PLL10-G04
PLL06-G01	PLL12-G02
PLL06-G02	PLL12-G03
PLL06-G03	PLL12-G04
PLL08-G01	PLL14-G03
PLL08-G02	PLL14-G04
PLL08-G03	PLL16-G03
PLL08-G04	PLL16-G04
PLL10-G01	

### MALE BRANCH TEE



Tube(Metric) - Thread(G)	
PT04-G01	PT10-G02
PT04-G02	PT10-G03
PT04-G03	PT10-G04
PT06-G01	PT12-G02
PT06-G02	PT12-G03
PT06-G03	PT12-G04
PT08-G01	PT14-G03
PT08-G02	PT14-G04
PT08-G03	PT16-G03
PT08-G04	PT16-G04
PT10-G01	

### FEMALE BRANCH TEE



Tube(Metric) - Thread(G)	
PTF04-G01	PTF10-G02
PTF04-G02	PTF10-G03
PTF04-G03	PTF10-G04
PTF06-G01	PTF12-G02
PTF06-G02	PTF12-G03
PTF06-G03	PTF12-G04
PTF08-G01	PTF14-G03
PTF08-G02	PTF14-G04
PTF08-G03	PTF16-G03
PTF08-G04	PTF16-G04
PTF10-G01	

### MALE RUN TEE



Tube(Metric) - Thread(G)	
PST04-G01	PST10-G02
PST04-G02	PST10-G03
PST04-G03	PST10-G04
PST06-G01	PST12-G02
PST06-G02	PST12-G03
PST06-G03	PST12-G04
PST08-G01	PST14-G03
PST08-G02	PST14-G04
PST08-G03	PST16-G03
PST08-G04	PST16-G04
PST10-G01	

### MALE Y



Tube(Metric) - Thread(G)	
PWT04-G01	PWT10-G02
PWT04-G02	PWT10-G03
PWT04-G03	PWT10-G04
PWT06-G01	PWT12-G02
PWT06-G02	PWT12-G03
PWT06-G03	PWT12-G04
PWT08-G01	PWT14-G03
PWT08-G02	PWT14-G04
PWT08-G03	PWT16-G03
PWT08-G04	PWT16-G04
PWT10-G01	

### MALE BANJO



Tube(Metric) - Thread(G)	
PH04-G01	PH10-G02
PH04-G02	PH10-G03
PH04-G03	PH10-G04
PH06-G01	PH12-G02
PH06-G02	PH12-G03
PH06-G03	PH12-G04
PH08-G01	
PH08-G02	
PH08-G03	
PH08-G04	
PH10-G01	

**FEMALE BANJO**  
**PHF-G**



φD T

Tube(Metric) - Thread(G)	
PHF04-G01	PHF08-G04
PHF04-G02	PHF10-G01
PHF04-G03	PHF10-G02
PHF06-G01	PHF10-G03
PHF06-G02	PHF10-G04
PHF06-G03	PHF12-G02
PHF08-G01	PHF12-G03
PHF08-G02	PHF12-G04
PHF08-G03	

**BULKHEAD FEMALE STRAIGHT**  
**PMF-G**



φD T

Tube(Metric) - Thread(G)	
PMF04-G01	PMF10-G02
PMF04-G02	PMF10-G03
PMF04-G03	PMF10-G04
PMF06-G01	PMF12-G02
PMF06-G02	PMF12-G03
PMF06-G03	PMF12-G04
PMF08-G01	PMF14-G03
PMF08-G02	PMF14-G04
PMF08-G03	PMF16-G03
PMF08-G04	PMF16-G04
PMF10-G01	

**MALE TRIPLE UNION**  
**PKB-G**



φD T

Tube(Metric) - Thread(G)	
PKB04-G01	PKB08-G02
PKB04-G02	PKB08-G03
PKB04-G03	PKB08-G04
PKB06-G01	
PKB06-G02	
PKB06-G03	
PKB08-G01	

**MALE TRIPLE BRANCH REDUCER**  
**PKD-G**



φD<sub>1</sub> φD<sub>2</sub> T

Tube(Metric) - Thread(G)	
PKD 06-04-G01	
PKD 08-04-G02	
PKD 08-04-G02	
PKD 10-04-G03	

## Compact One Touch Tube Fittings

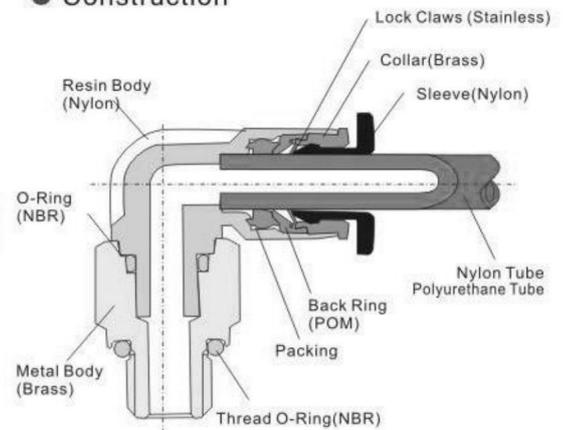
### Features

- The smallest pneumatic fittings.
- 40% less volume and a 20% smaller OD than the standard One Touch Design
- Compact one touch fittings are specially designed for pneumatic installations in equipment that is small and compact in size.

### Specifications

Fluid Type	Air ( No other types of gases or liquids )	
Working Pressure Range	0~150PSI	0~9.9kgf/cm <sup>2</sup> (0~990KPa)
Negative Pressure	-29.5 in Hg	-750mm Hg(10 Torr)
Working Temperature	32~140°F	0-60°C
Recommended tube material	Nylon Or Polyurethane	

### Construction



### Products Code System

- ① Model type      ③ Thread size  
② Tube outer dia    ④ Compact



**MALE STRAIGHT**  
**PC-C**



φD T

Tube(Metric) - Thread(R)	Tube(Inch) - Thread(NPT)
PC 03-M3C	PC 1/8-U10C
PC 03-M5C	PC 1/8-N00C
PC 03-M6C	PC 1/8-N01C
PC 04-M3C	PC 5/32-U10C
PC 04-M5C	PC 5/32-N00C
PC 04-M6C	PC 5/32-N01C
PC 04-01C	PC 1/4-U10C
PC 04-G01C	PC 1/4-N00C
PC 06-M5C	PC 1/4-N01C
PC 06-M6C	
PC 06-01C	
PC 06-G01C	

**ROUND MALE STRAIGHT**  
**POC-C**



φD T

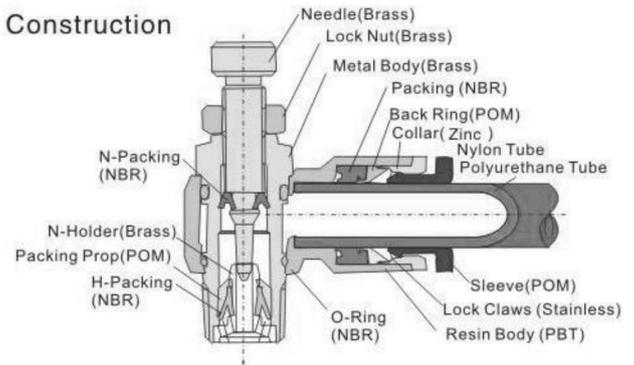
Tube(Metric) - Thread(R)	Tube(Inch) - Thread(NPT)
POC 03-M3C	POC 1/8-U10C
POC 03-M5C	POC 1/8-N00C
POC 03-M6C	POC 1/8-N01C
POC 04-M3C	POC 5/32-U10C
POC 04-M5C	POC 5/32-N00C
POC 04-M6C	POC 5/32-N01C
POC 04-01C	POC 1/4-U10C
POC 04-G01C	POC 1/4-N00C
POC 06-M5C	POC 1/4-N01C
POC 06-M6C	
POC 06-01C	
POC 06-G01C	



**Features**

- Accurate regulation of air flow rate for precise motion control.
- All NPT & R(BSPT) thread are pre-coated with Teflon sealant

**Construction**



**When you order control in type, Please put B at the end of model type. For example:NSE08-02B**



Tube(Metric) - Thread(R)		Tube(Inch) - Thread(R)		Tube(Inch) - Thread(NPT)	
NSE04-M5	NSE08-03	NSE1/8-01	NSE5/16-03	NSE1/8-U10	NSE1/4-N02
NSE04-M6	NSE08-04	NSE1/8-02	NSE5/16-04	NSE1/8-N01	NSE1/4-N03
NSE04-01	NSE10-01	NSE5/32-01	NSE3/8-01	NSE1/8-N02	NSE5/16-N01
NSE04-02	NSE10-02	NSE5/32-02	NSE3/8-02	NSE5/32-U10	NSE5/16-N02
NSE04-03	NSE10-03	NSE3/16-01	NSE3/8-03	NSE5/32-N01	NSE5/16-N03
NSE06-M5	NSE10-04	NSE3/16-02	NSE3/8-04	NSE5/32-N02	NSE3/8-N01
NSE06-M6	NSE12-01	NSE3/16-03	NSE1/2-02	NSE3/16-U10	NSE3/8-N02
NSE06-01	NSE12-02	NSE1/4-01	NSE1/2-03	NSE3/16-N01	NSE3/8-N03
NSE06-02	NSE12-03	NSE1/4-02	NSE1/2-04	NSE3/16-N02	NSE3/8-N04
NSE06-03	NSE12-04	NSE1/4-03		NSE3/16-N03	NSE1/2-N02
NSE08-01	NSE16-03	NSE5/16-01		NSE1/4-U10	NSE1/2-N03
NSE08-02	NSE16-04	NSE5/16-02		NSE1/4-N01	NSE1/2-N04



Tube(Metric) - Thread(G)	
NSE04-G01	NSE10-G01
NSE04-G02	NSE10-G02
NSE04-G03	NSE10-G03
NSE06-G01	NSE10-G04
NSE06-G02	NSE12-G02
NSE06-G03	NSE12-G03
NSE08-G01	NSE12-G04
NSE08-G02	NSE16-G03
NSE08-G03	NSE16-G04
NSE08-G04	



Tube(Metric)	Tube(Inch)
NSF 04	NSF 1/8
NSF 06	NSF 5/32
NSF 08	NSF 3/16
NSF 10	NSF 1/4
NSF 12	NSF 5/16
	NSF 3/8
	NSF 1/2



Tube(Metric) - Thread(R)		Tube(Metric) - Thread(G)		Tube(Inch) - Thread(NPT)	
NSFSF04-01	NSFSF10-04	NSFSF04-G01	NSFSF10-G04	NSFSF1/8-N01	NSFSF3/8-N01
NSFSF06-01	NSFSF12-02	NSFSF06-G01	NSFSF12-G02	NSFSF5/32-N01	NSFSF3/8-N02
NSFSF06-02	NSFSF12-03	NSFSF06-G02	NSFSF12-G03	NSFSF3/16-N01	NSFSF3/8-N03
NSFSF08-01	NSFSF12-04	NSFSF08-G01	NSFSF12-G04	NSFSF1/4-N01	NSFSF3/8-N04
NSFSF08-02		NSFSF08-G02		NSFSF1/4-N02	NSFSF1/2-N01
NSFSF08-03		NSFSF08-G03		NSFSF5/16-N01	NSFSF1/2-N02
NSFSF10-02		NSFSF10-G02		NSFSF5/16-N02	NSFSF1/2-N03
NSFSF10-03		NSFSF10-G03		NSFSF5/16-N03	NSFSF1/2-N04



Tube(Metric) - Thread(R)		Tube(Metric) - Thread(G)		Tube(Inch) - Thread(NPT)	
NSFSS01-01		NSFSSG01-G01		NSFSSN01-N01	
NSFSS02-02		NSFSSG02-G02		NSFSSN02-N02	
NSFSS03-03		NSFSSG03-G03		NSFSSN03-N03	
NSFSS04-04		NSFSSG04-G04		NSFSSN04-N04	

## Part numbers with rod end bracket and/or pivot bracket available

Not necessary to order a bracket for the applicable cylinder separately

Note) Mounting bracket is shipped together with the product, but not assembled.

Example) **CDA2** **D** 40-100Z- **N** **W** -M9BW

• Mounting

### Pivot bracket

<b>Nil</b>	None
<b>N</b>	Pivot bracket is shipped together with the product, but not assembled.

\* Applicable to only mounting D (Double clevis) and T (Center trunnion).

**N:** Kit of pivot bracket and double clevis



Kit of pivot bracket and trunnion



### Rod end bracket

<b>Nil</b>	None
<b>V</b>	Single knuckle joint
<b>W</b>	Double knuckle joint

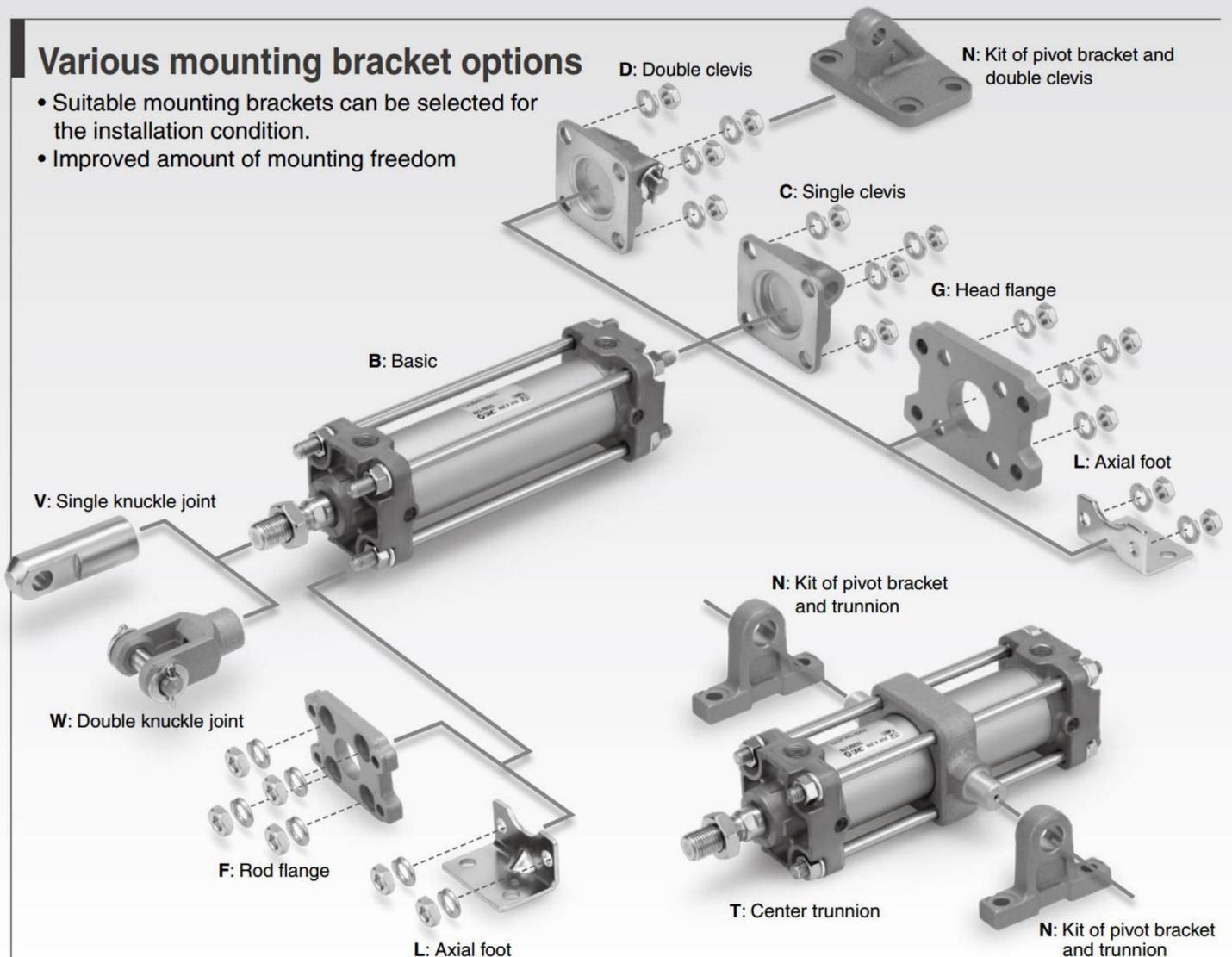
**With rod end bracket**

**V:** Single knuckle joint **W:** Double knuckle joint



## Various mounting bracket options

- Suitable mounting brackets can be selected for the installation condition.
- Improved amount of mounting freedom



Reduced weight by changing the shape of the rod cover and head cover.

Bore size (mm)	CA2	Reduction rate	Current model <sup>(kg)</sup>
40	0.93	12%	1.06
50	1.31	15%	1.54
63	1.84	14%	2.15
80	3.17	11%	3.56
100	4.29	10%	4.76

\* Compared to 50 stroke for each size



**WENZHOU QIAOSEN PNEUMATIC CO., LTD**

Mr. Carson Zhang

Mob: +86 15397088192

Email: [Carson@joosungauto.com](mailto:Carson@joosungauto.com)

Add: NO.558 NINGKANG ROAD, YUEQING, 325600,WENZHOU,CHINA

