

# THREE POINT CHUCK

## AG1J Series

Cat No AG1J - 01 - 01 - A

### THREE POINT CHUCK - Ø25, 32, 40, 50, 63 mm

#### Features

- Constant center of gripping
- Hard anodised body
- Suitable for internal or external holding
- Compact design
- Magnetic sensing as standard

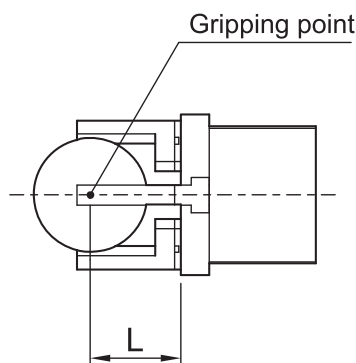


#### Technical Specifications

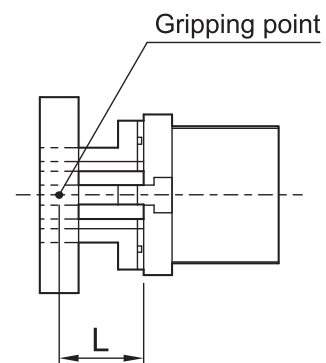
Model		AG1J-25	AG1J-32	AG1J-40	AG1J-50	AG1J-63
Bore size		Ø25	Ø32	Ø40	Ø50	Ø63
Port size		M5 x 0.8P				
Fluid		Air				
Type of operation		Double acting				
Pressure range		1.5 - 7 bar				
Range of service temperature		0 - 60° C				
Repetition accuracy		± 0.01 mm				
Max. operation frequency		min 120	60			
Lubrication	Cylinder	Lubrication free				
	Lever section	Required (Apply to grease to sliding section)				
Gripping force	Internal diameter N	42	74	125	200	340
	Outer diameter N	47	88	135	220	380
Lever open/close stroke		mm 6	8	8	12	16
Magnet device		With magnet				

Note: The gripping force for the pressure is 5 bar, gripping point L=20m, please refer flow graph.

#### Length of gripping point



**Out-side clamp**



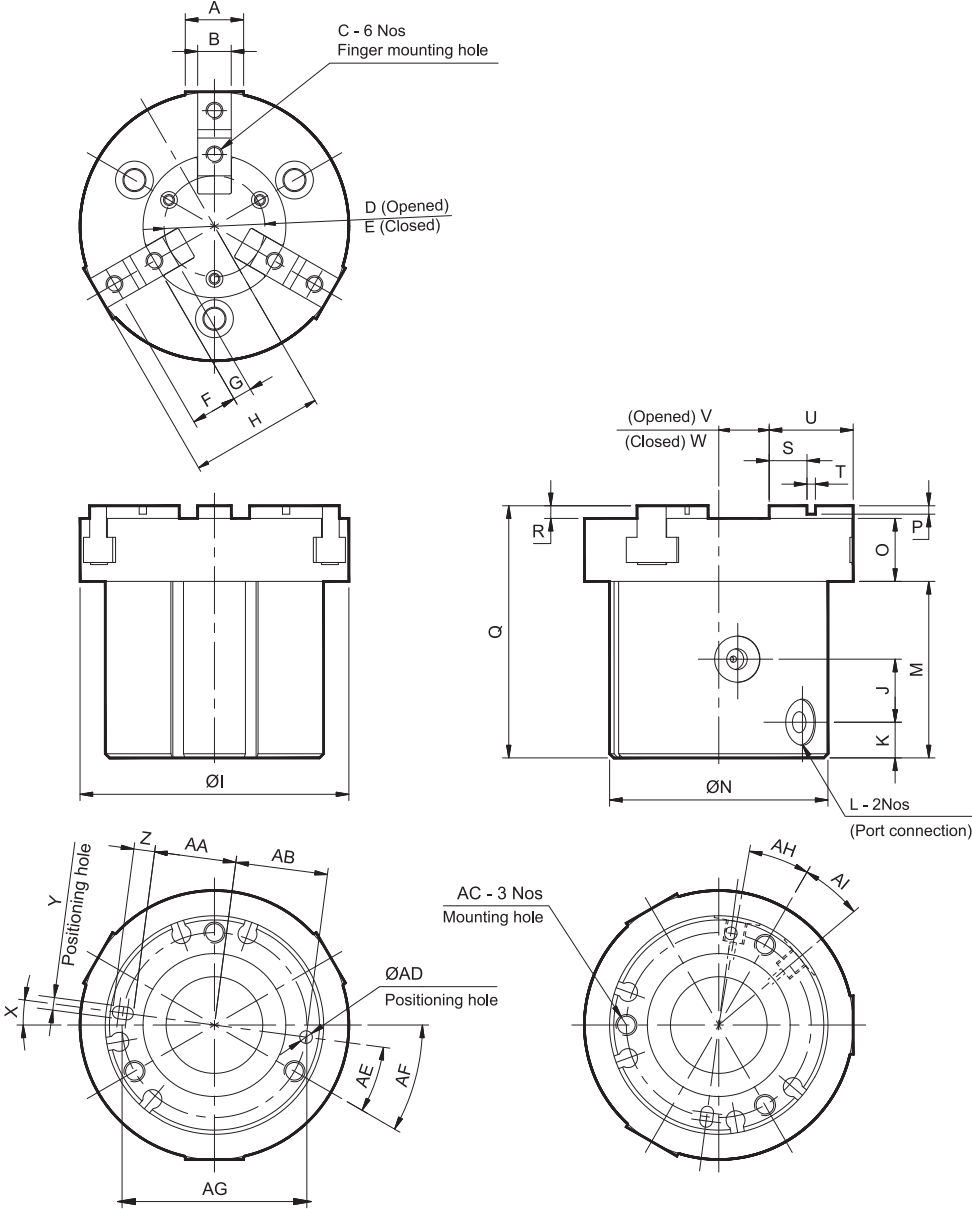
**In-side clamp**

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### Basic Dimension



Bore dia (mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
AG1J- 25	12	6	M3x0.5Px6dp	20	14	8	3	24	48	17	7.6	M5x0.8P	40	42	12	2	55	3	6
AG1J- 32	14	8	M4x0.7Px8dp	24	16	11	4.5	32	64	15	8.5	M5x0.8P	42	52	15	2	60	3	9
AG1J- 40	16	8	M4x0.7Px8dp	28	20	12	4.5	35	70	16.5	9	M5x0.8P	44	62	15	2	62	3	9
AG1J- 50	18	10	M5x0.8Px10dp	34	22	14	5	41	82	19.5	10	M5x0.8P	49	70	20	2	72	3	10
AG1J- 63	24	12	M5x0.8Px10dp	46	30	17	5.5	51	102	25.8	10.7	M5x0.8P	59	86	25	3	88	4	11

Bore dia (mm)	T	U	V	W	X°	Y <sup>+0.04+0</sup>	Z	AA	AB	AC	AD <sup>+0.04+0</sup>	AE°	AF°	AG	AH°	AI°
AG1J- 25	2	14	10	7	7.5	Ø3x3dp	5	15	17	M4x0.7Px10dp	Ø3x3dp	22.5	30	34	20	20
AG1J- 32	2	20	12	8	7.5	Ø3x3dp	5	18.5	20	M5x0.8Px10dp	Ø3x3dp	22.5	30	44	20	20
AG1J- 40	3	21	14	10	7.5	Ø4x4dp	6	23.5	26.5	M5x0.8Px10dp	Ø4x4dp	22.5	30	53	20	20
AG1J- 50	4	24	17	11	7.5	Ø4x4dp	6	28	31	M5x0.8Px10dp	Ø4x4dp	22.5	30	62	20	20
AG1J- 63	6	28	23	15	7.5	Ø5x5dp	7	34.5	38	M6x1.0Px10dp	Ø5x5dp	22.5	30	76	20	20

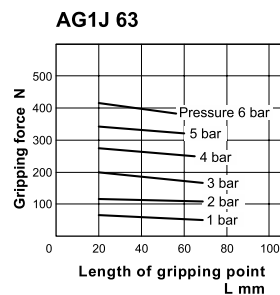
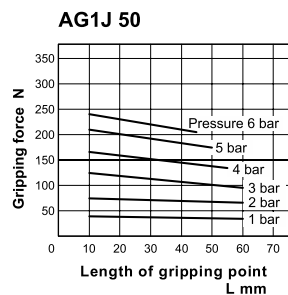
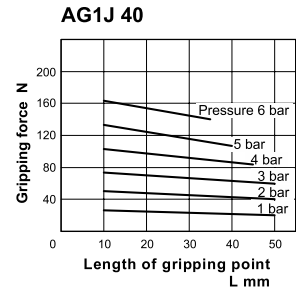
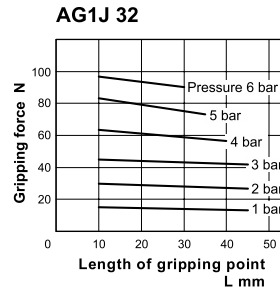
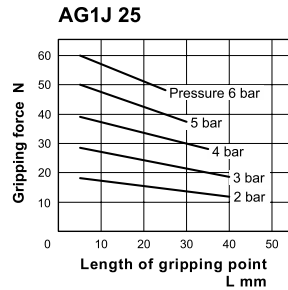
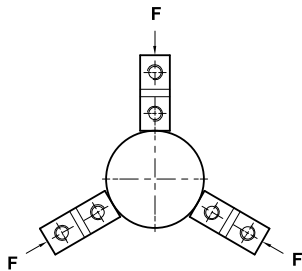
# THREE POINT CHUCK

## AG1J Series

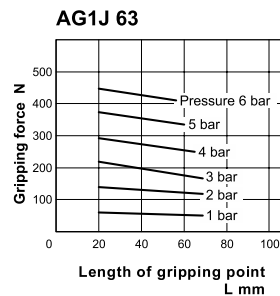
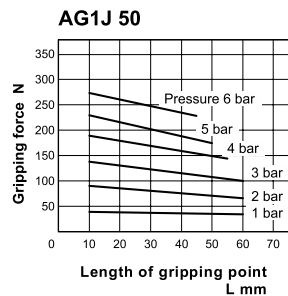
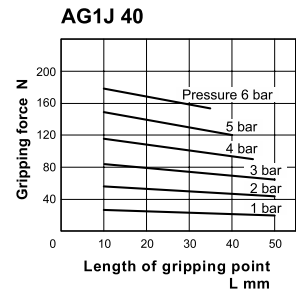
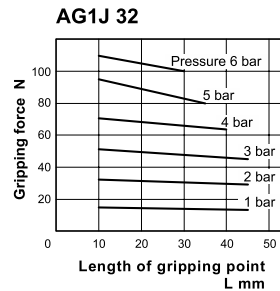
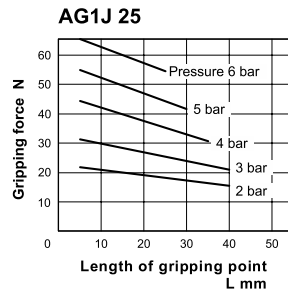
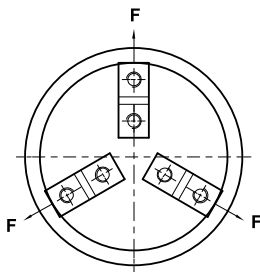
Cat No AG1J - 01 - 01 - A

### Gripping force

#### Out-side clamp



### In-side clamp



### How to order

**AG1J01**

Bore (mm)	
025	- Ø25
032	- Ø32
040	- Ø40
050	- Ø50
063	- Ø63

Mountings	
B	- Basic

### Ordering Example :

Ordering no. for three point chuck with 40 dia bore : **AG1J01040B**

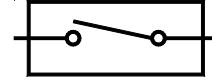
Subject to change

# THREE POINT CHUCK

## AG1J Series

Cat No AG1J - 01 - 01 - A

### ACCESSORIES FOR THREE POINT CHUCK



### MAGNETIC SENSOR - AM090

#### Features

- ❑ Integrated LED
- ❑ Moulded cable with flying lead and Quick Disconnect (QD) connector versions
- ❑ Direct mounting, simple installation
- ❑ Reed contact type & Solid state type versions

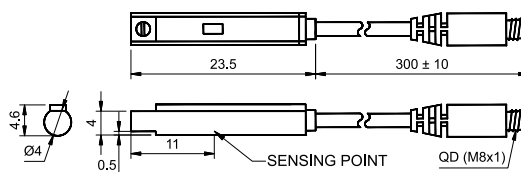
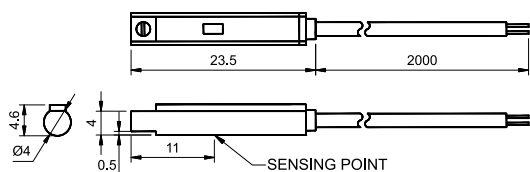
#### Function

The pistons of these cylinders are equipped with a permanent magnet, which activates the cylinder switches when it approaches these. The switch in question then outputs an electrical or pneumatic signal.

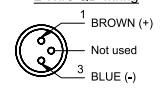
#### Technical Specifications

Circuit and connection diagram			
<b>Model</b>	<b>AM090</b>		
Bore dia mm	25, 32, 40, 50, 63		
Wiring system	Two lead wire type	Three lead wire type	
Switching voltage	DC: 5 ~ 120V AC: 5 ~ 120V		DC: 5 ~ 30V
Switching current	100mA max.		200mA max.
Contact capacity	6W max.		6W max.
Delay time	< 2ms (500Hz)		< 1ms (500Hz)
Contact	Normally open	NPN. Current sinking	PNP. Current sourcing
Production grade	IP-67		
Colour of LED	Red	Red	Green
Cable	Ø 2.8 wire cable, 2M		Ø 3.3, 3 single wire, 2M
Voltage drop	3.5 V max.		1 V max.
Voltage consumption	---		OFF: 7mA (24V) ON: 8mA (24V) max
Contact protective circuit	Non.		Yes
Operating temperature	-10° to 70° C		

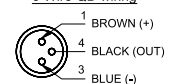
### AM090



2 Wire QD wiring



3 Wire QD wiring



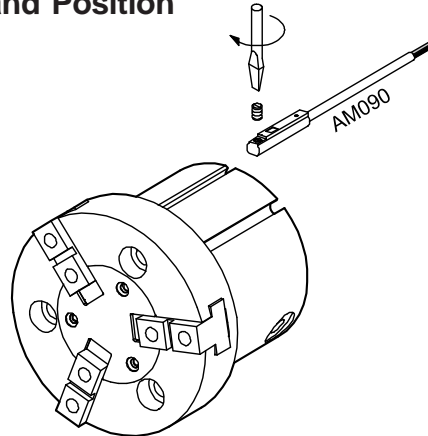
Subject to change

# THREE POINT CHUCK

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### Sensor switch installing and Position



### Sensing range

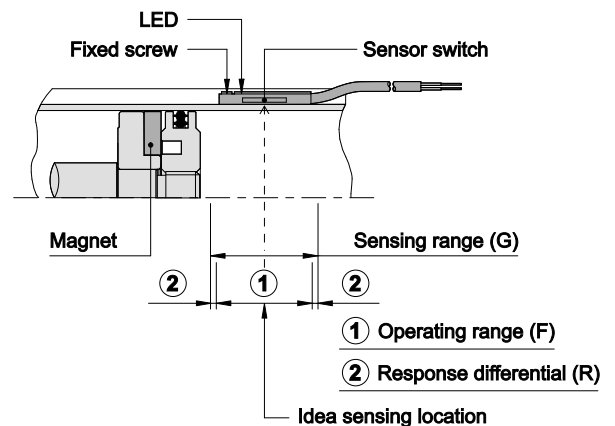
Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

### Operating range

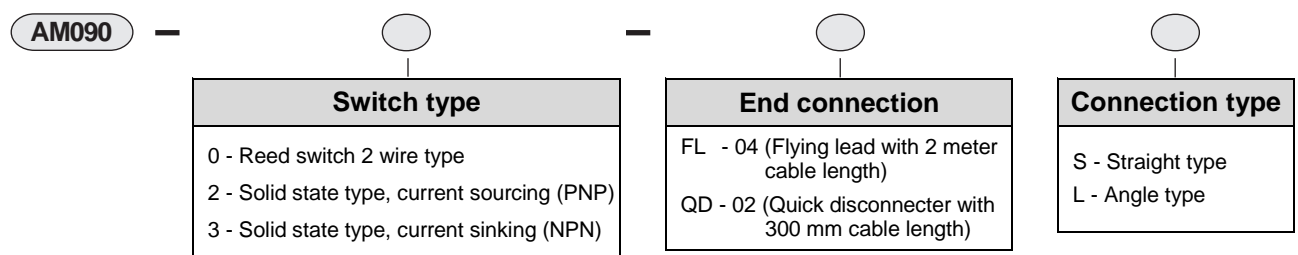
When piston head moves the switch setting and adjustment will be based on the responding range generated by the magnetic field and the switch. (Please refer to the table)

Model	AM090	
Bore size	Operating range (F)	Response differential (R)
Ø25	07 (03)	1
Ø32	10 (07)	1
Ø40	12 (09)	1
Ø50	14 (12)	1
Ø63	17 (14)	1.2

### Sensor switch setting and Operating range



### How to order



Ordering example :- Reed switch 2 wire type with Flying lead of 2 meter cable length, straight type : **AM090-0FL-04S**

Subject to change