

THREE POINT CHUCK

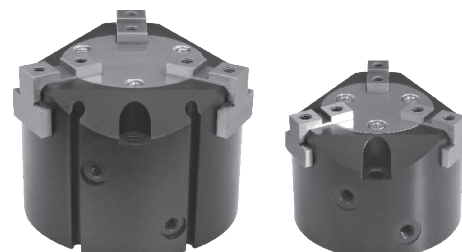
Series AG3J

Cat No AG3J - 01 - 01 - B

THREE POINT CHUCK - Ø16, 20, 25, 32, 40, 50, 63, 80, 100 mm

Features

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

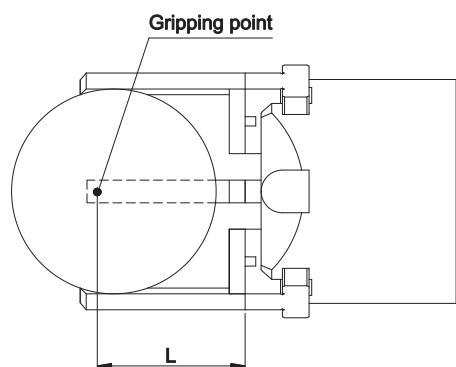


Technical Specifications

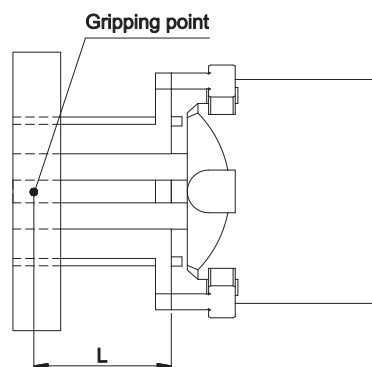
Model			AG3J-16	AG3J-20	AG3J-25	AG3J-32	AG3J-40	AG3J-50	AG3J-63	AG3J-80	AG3J-100
Bore size			Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Port size	Side	M3			M5					1/8	1/4
	Bottom	-				M5					1/8
Fluid			Air								
Type of operation			Double acting								
Pressure range		bar	3 to 7								
Range of service temperature		C	0° to 60°								
Repetition accuracy		mm	± 0.01								
Maximum operation frequency		min	120			60				30	
Lubrication	Cylinder		Lubrication free								
	Lever section		Required (Apply to grease to sliding section)								
Gripping force	Internal diameter	N	14	25	30	70	131	282	446	578	946
	Outer diameter	N	16	28	35	82	149	314	496	641	1009
Lever open/close stroke		mm	4	4	6	8	8	12	16	20	24
Magnet device			With magnet								

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

Length of gripping point



Out-side clamp



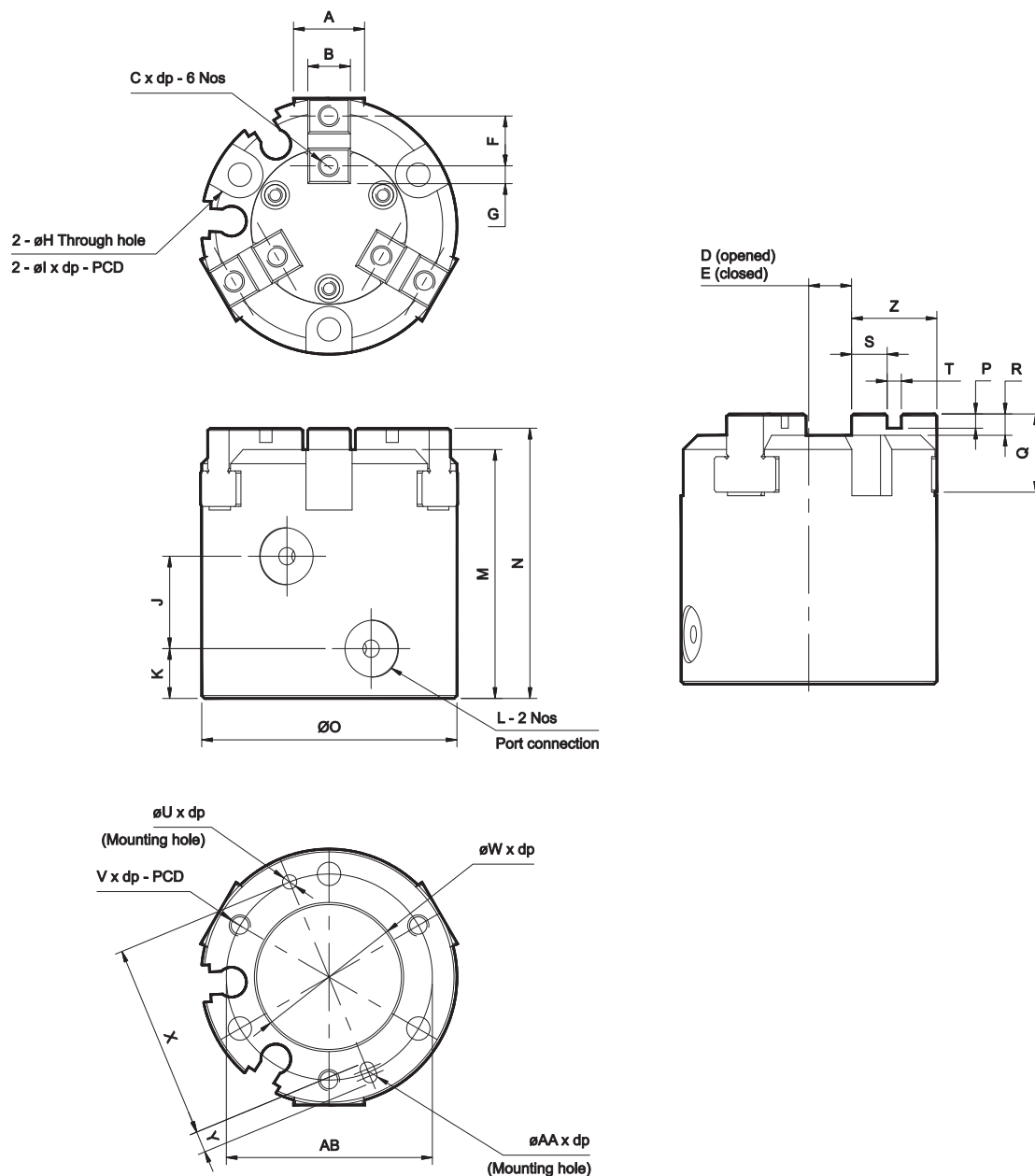
In-side clamp

THREE POINT CHUCK

Series AG3J

Cat No AG3J - 01 - 01 - B

AG3J-16, AG3J-20



Bore dia (mm)	A	B	C	D +1.0 -0.0	E +0.0 -0.5	F	G	H	I	J	K	L	M	N	O	P	Q	R
AG3J-16	8	5	M3x0.5Px4dp	7	5	6	2	Ø3.3	Ø6.5x7dp - PCD 25	9	8	M3x0.5P	32	35	Ø30	2	10	3
AG3J-20	10	6	M3x0.5Px6dp	8	6	7	2.5	Ø3.3	Ø6.5x8.5dp - PCD 29	13	7	M3x0.5P	35	38	Ø36	2	11	3

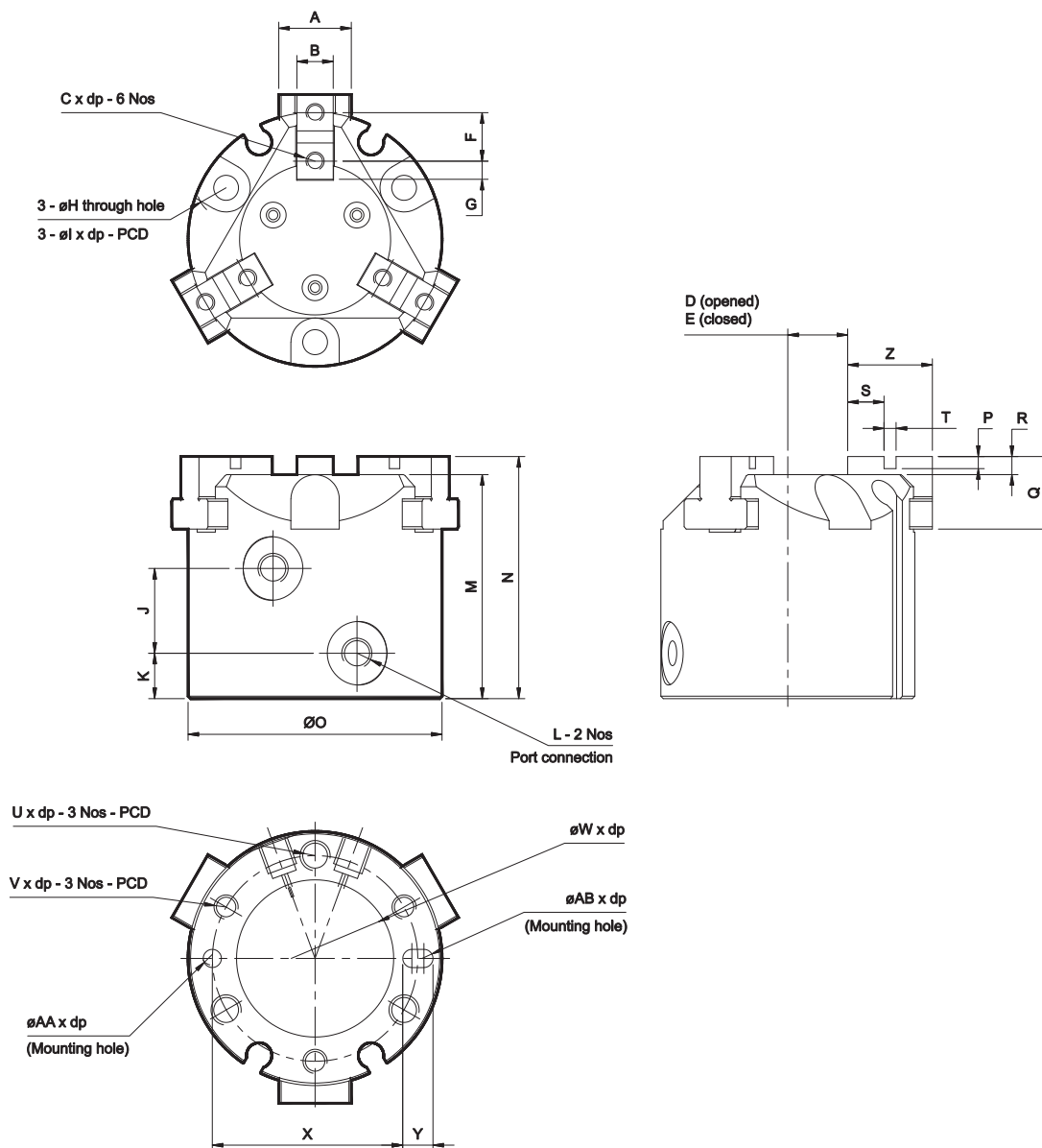
Bore dia (mm)	S	T +0.02 -0	U +0.02 -0	V	W +0.05 +0.02	X	Y	Z	AA +0.02 -0	AB
AG3J-16	4	2	Ø2x2.2dp	M3x0.5Px4.5dp - PCD 25	Ø17x3dp	23.5	3	10	Ø2x2.2dp	25
AG3J-20	5	2	Ø2x2.2dp	M3x0.5Px8dp - PCD 29	Ø21x2.8dp	27.5	3	12	Ø2x2.2dp	29

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AG3J-25



Bore dia (mm)	A	B	C	D +1.0 -0.0	E +0.0 -0.5	F	G	H	I	J	K	L	M	N	O	P	Q	R
AG3J-25	12	6	M3x0.5Px6dp	13	10	8	3	Ø4.2	Ø8x9dp - PCD 34	14	7.5	M5x0.8P	37	40	Ø42	2	12	3

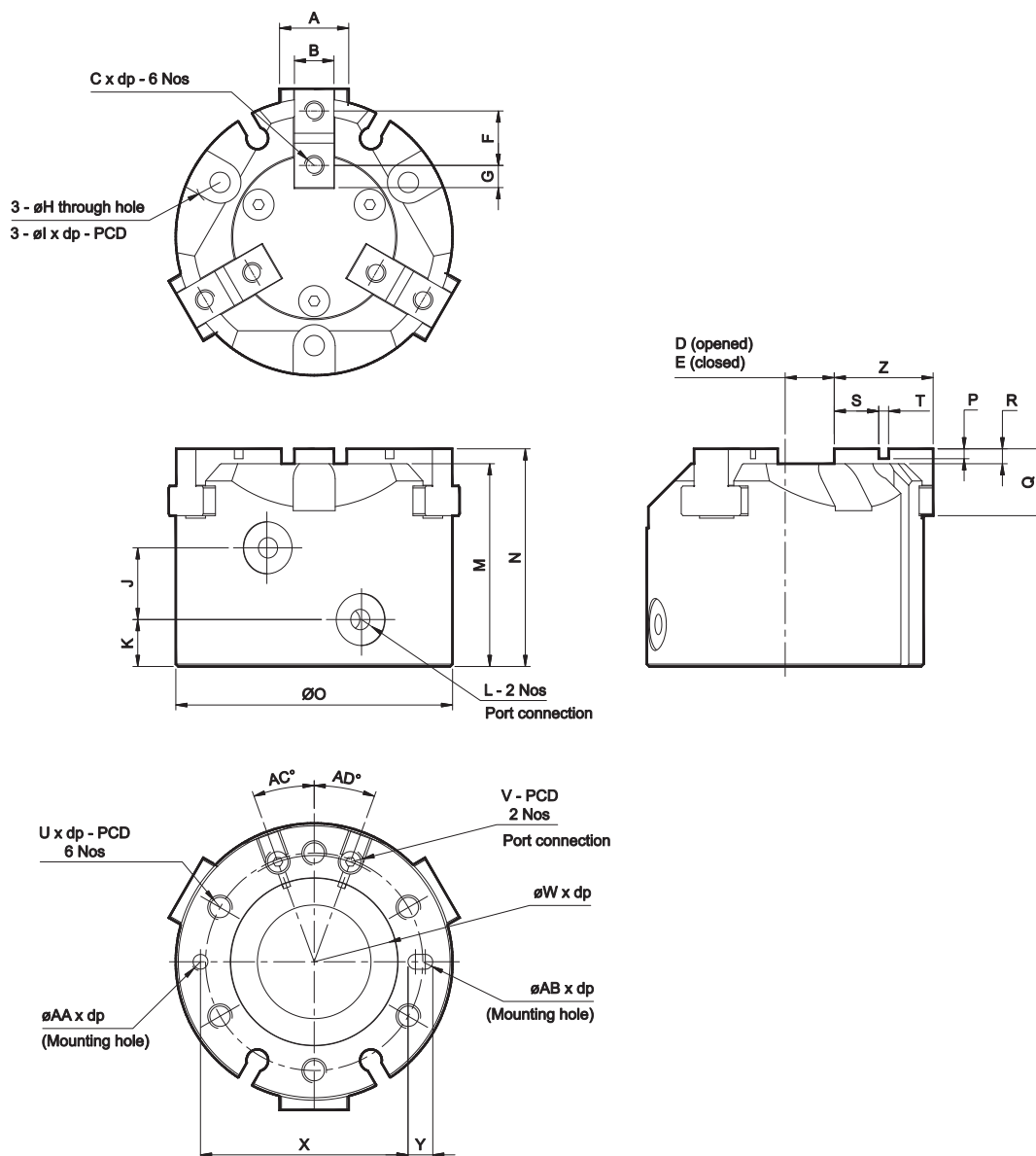
Bore dia (mm)	S	T +0.02 -0	U	V	W +0.05 +0.02	X	Y	Z	AA +0.02 -0	AB +0.02 -0
AG3J-25	6	2	M5x0.8Px10dp - PCD 34	M4x0.7Px10dp - PCD 34	Ø26x1.5dp	31.5	5	14	Ø3x3dp	Ø3x3dp

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Series AG3J

Cat No AG3J - 01 - 01 - B

AG3J-32, AG3J-40, AG3J-50, AG3J-63



Bore dia (mm)	A	B	C	D +1.0 -0.0	E +0.0 -0.5	F	G	H	I	J	K	L	M	N	O	P	Q	R
AG3J-32	14	8	M4x0.7Px9dp	14	10	11	4.5	Ø4.2	Ø8x9.5dp - PCD 44	14.5	9.5	M5x0.8P	41	44	Ø56	2	13.5	3
AG3J-40	16	8	M4x0.7Px9dp	16	12	12	4.5	Ø5.1	Ø9.5x12dp - PCD 53	14	10	M5x0.8P	44	47	Ø62	2	15	3
AG3J-50	18	10	M5x0.8Px10dp	19	13	14	5	Ø5.1	Ø9.5x11.5dp - PCD 62	18	10	M5x0.8P	52	55	Ø70	2	17.5	3
AG3J-63	24	12	M5x0.8Px10dp	25.5	17.5	17	5.5	Ø6.5	Ø11x15dp - PCD 76	22	12	M5x0.8P	62	66	Ø86	3	22	4

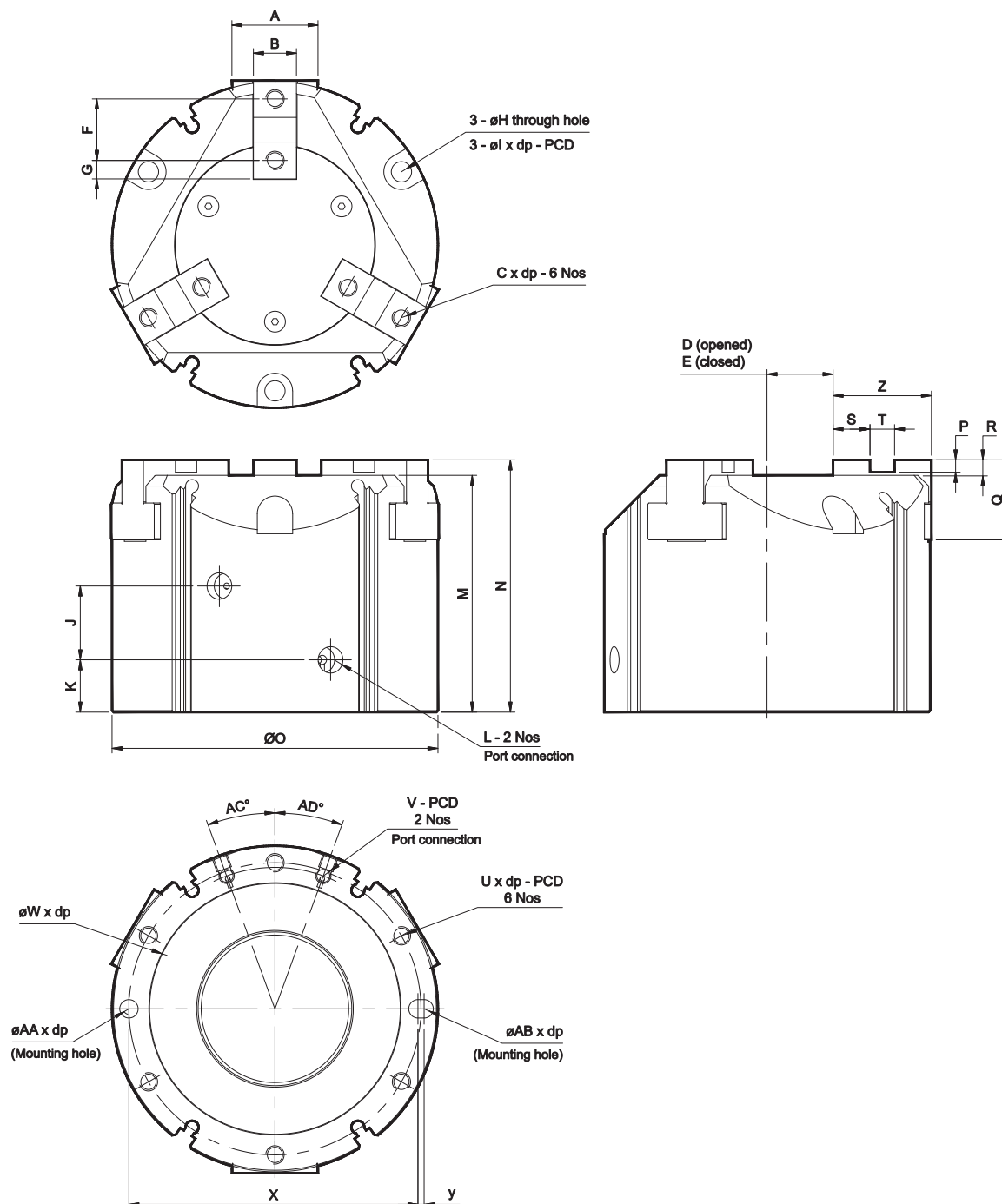
Bore dia (mm)	S	T +0.02 -0	U	V	W +0.02 +0.05	X	Y	Z	AA +0.02 -0	AB +0.02 -0	AC°	AD°
AG3J-32	9	2	M5x0.8Px10dp - PCD 44	M5x0.8P - PCD 43	Ø34x0.75dp	42	5	20	Ø3x3dp	Ø3x3dp	20	20
AG3J-40	9	3	M6x1.0Px14dp - PCD 53	M5x0.8P - PCD 51	Ø42x0.9dp	50	6	21	Ø4x4dp	Ø4x4dp	20	20
AG3J-50	10	4	M6x1.0Px14dp - PCD 62	M5x0.8P - PCD 61	Ø52x1.5dp	59	6	24	Ø4x4dp	Ø4x4dp	20	20
AG3J-63	11	6	M6x1.0Px14dp - PCD 76	M5x0.8P - PCD 76	Ø65x2dp	72.5	7	28	Ø5x5dp	Ø5x5dp	20	20

THREE POINT CHUCK

Series AG3J

Cat No AG3J - 01 - 01 - B

AG3J-80



Bore dia (mm)	A	B	C	D +1.0 -0.0	E +0.0 -0.5	F	G	H	I	J	K	L	M	N	O	P	Q	R
AG3J-80	28	14	M6x1.0Px12dp	31.5	21.5	20	6	Ø6.8	Ø11.5x19dp - PCD 95	24	17	G1/8	77	82	Ø106	4	26	5

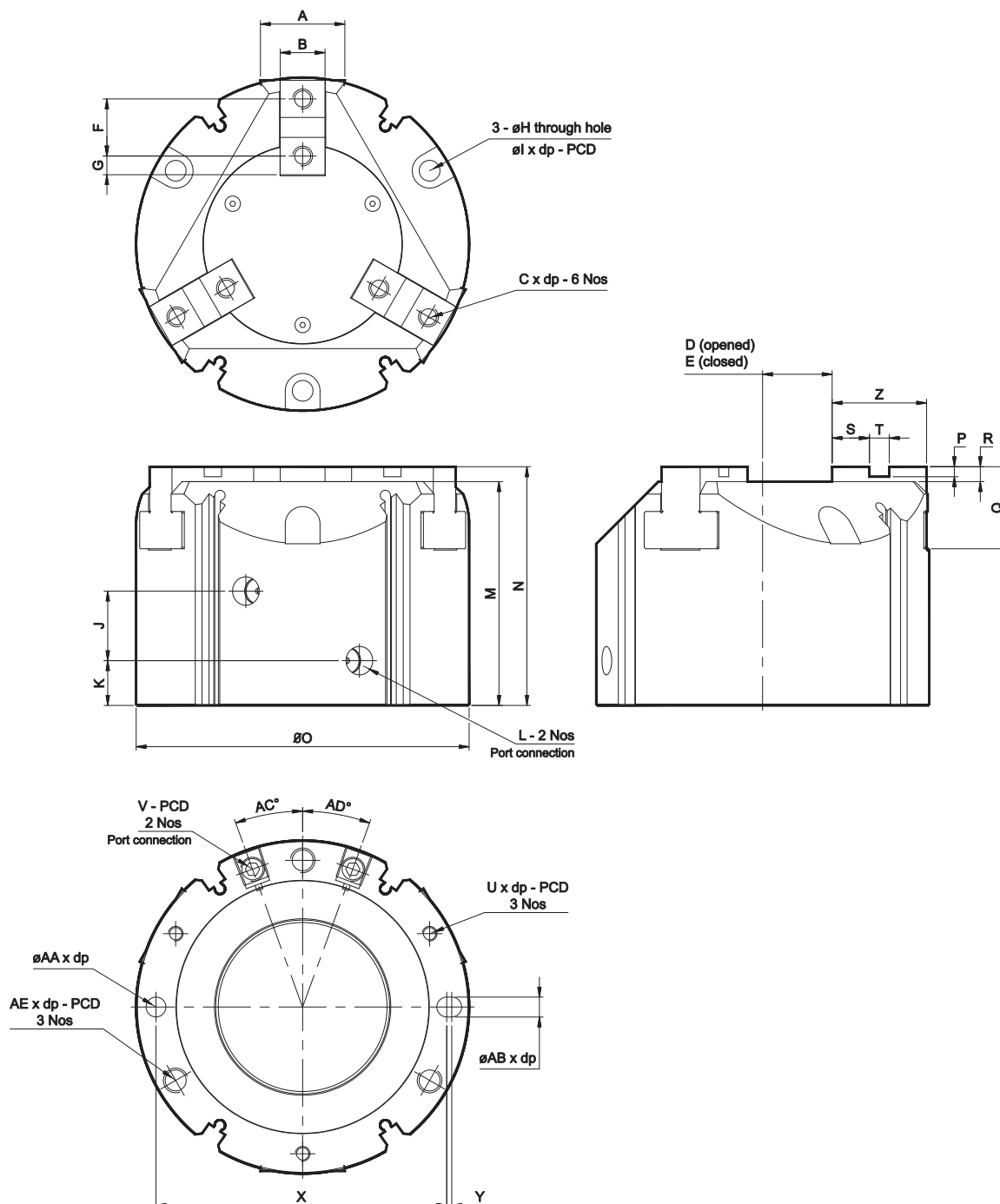
Bore dia (mm)	S	T +0.03 -0	U	V	W +0.05 +0.02	X	Y	Z	AA +0.03 -0	AB +0.03 -0	AC°	AD°
AG3J-80	12	8	M6x1.0Px12dp - PCD 95	M5x0.8P - PCD 92	Ø82x2dp	94	2	32	Ø6x6dp	Ø6x6dp	20	20

THREE POINT CHUCK

Series AG3J

Cat No AG3J - 01 - 01 - B

AG3J-100



Bore dia (mm)	A	B	C	D +1.0 -0.0	E +0.0 -0.5	F	G	H	I	J	K	L	M	N	O	P	Q	R
AG3J-100	34	18	M8x1.25Px16dp	40	28	23	7.5	Ø8.5	Ø14x25dp - PCD 118	28	18	G1/4	90	96	Ø134	4	33	6

Bore dia (mm)	S	T +0.03 -0	U	V	X	Y	Z	AA +0.03 -0	AB +0.03 -0	AC°	AD°	AE
AG3J-100	15	8	M8x1.25Px16dp - PCD 118	G1/8 - PCD 118	117	2	38	Ø8x6dp	Ø8x6dp	20	20	M10x1.5Px20dp - PCD 118

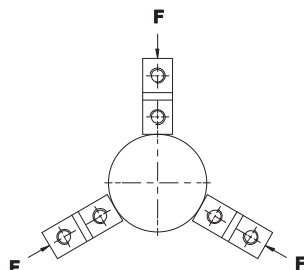
THREE POINT CHUCK

Series AG3J

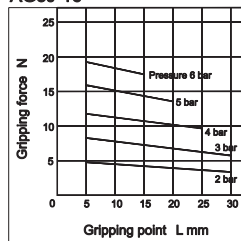
Cat No AG3J - 01 - 01 - B

Gripping force characteristic

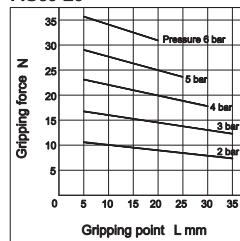
Out-side clamp



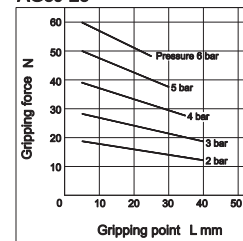
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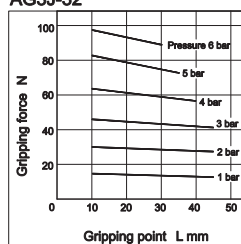
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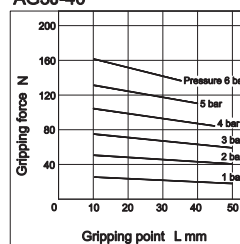
AG3J-25



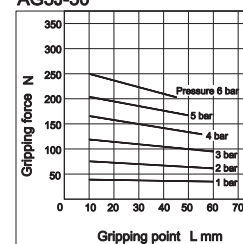
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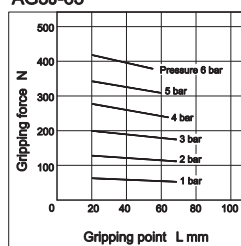
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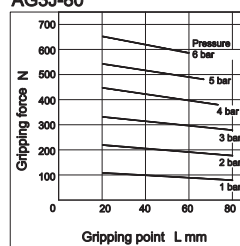
AG3J-50



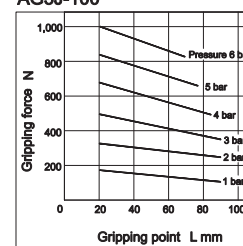
AG3J-63



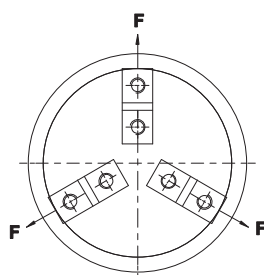
AG3J-80



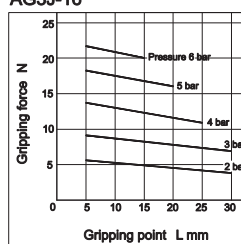
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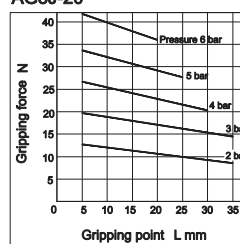
In-side clamp



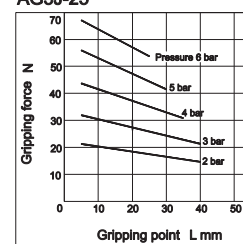
AG3J-16



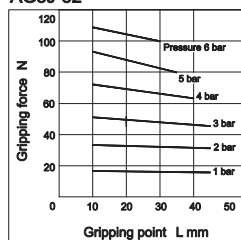
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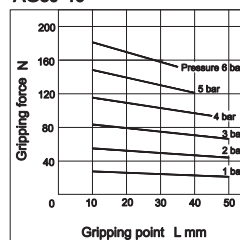
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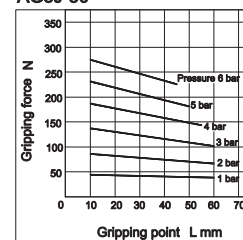
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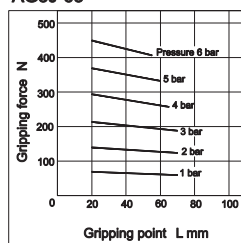
AG3J-40



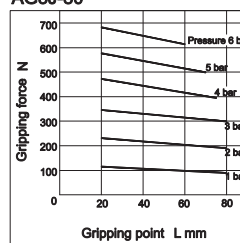
AG3J-50



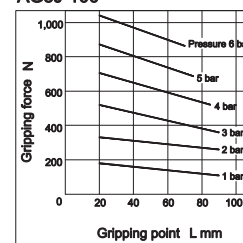
AG3J-63



AG3J-80



AG3J-100

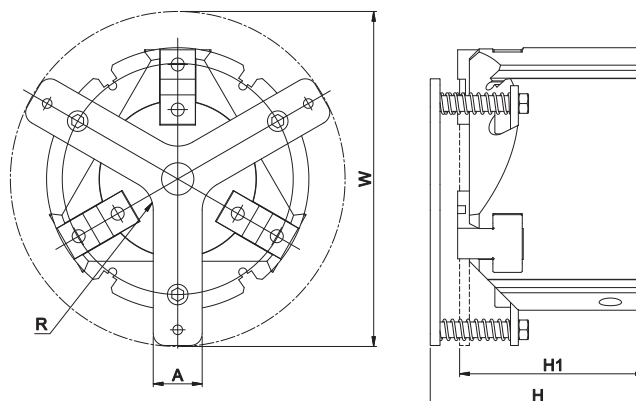


THREE POINT CHUCK

Series AG3J

Cat No AG3J - 01 - 01 - B

Three point chuck with push plate external dimensions



Item \ Model		AG3J-25	AG3J-32	AG3J-40	AG3J-50	AG3J-63	AG3J-80	AG3J-100
Mechanical dimensions	Height (H)	46.5	50	56	64	77	92	110
	Width (W)	70	79	87	96	121	140	171
	A	9	10	13	14	16	20	25
	R	R6	R6	R8	R8	R8	R10	R15
	Push plate Position (H1)	40	44	48	56	67	82	95

How to order

AG3J01

040

B

Bore (mm)	
016	- Ø16
020	- Ø20
025	- Ø25
032	- Ø32
040	- Ø40
050	- Ø50
063	- Ø63
080	- Ø80
100	- Ø100

Mountings	
B	- Basic
P	- Push plate

Note:
Push plate Ø25 to
Ø100mm only available.

Ordering Example:

Ordering no. for three point chuck with 40 dia bore: **AG3J01040B**

Ordering no. for three point chuck with 40 dia bore with Push plate: **AG3J01040P**

THREE POINT CHUCK

Series AG3J

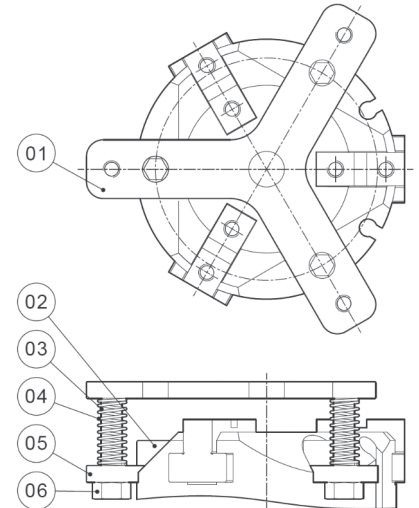
Cat No AG3J - 01 - 01 - B

ACCESSORIES FOR THREE POINT CHUCK

Push Plate

Components and material list

S. No.	Part name	Material
01	Push plate	Stainless steel
02	Screw	Stainless steel
03	Guide rod	Stainless steel
04	Spring	Stainless steel
05	Bracket	Stainless steel
06	Nut	Stainless steel



How to order

AGJP	040
Bore (mm)	
025	- Ø25
032	- Ø32
040	- Ø40
050	- Ø50
063	- Ø63
080	- Ø80
100	- Ø100

Ordering Example:

Ordering no. for Three point chuck Push plate 100 dia bore : **AGJP100**

THREE POINT CHUCK

Series AG3J

Cat No AG3J - 01 - 01 - B

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

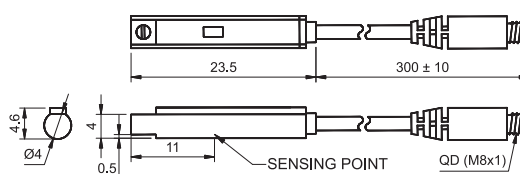
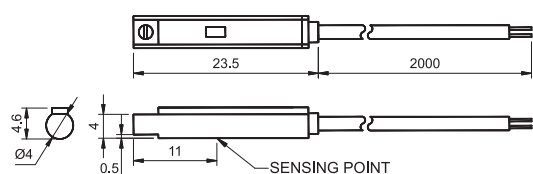
Function

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.

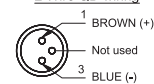
Technical Specifications

Circuit and connection diagram			
Model	AM090		
Bore dia	16, 20, 25, 32, 40, 50, 63, 80, 100 mm		
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		

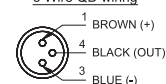
AM090



2 Wire QD wiring



3 Wire QD wiring

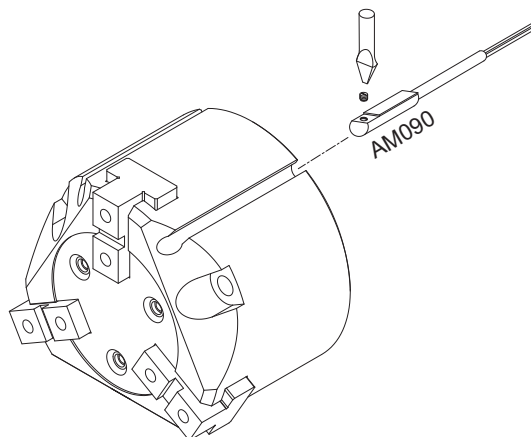


THREE POINT CHUCK

Series AG3J

Cat No AG3J - 01 - 01 - B

Sensor switch installing and Position



Sensing range

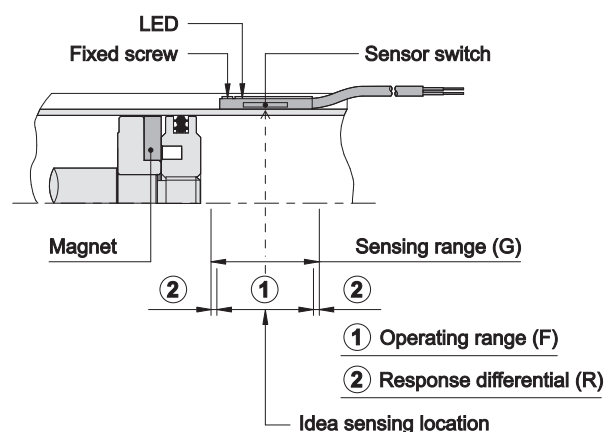
Sensor switch is fixed on the cylinder body. The magnetic piston head will activate the sensor switch when it enters the operating range. It has 0.5mm differential.

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

AM090	—	0	FL-04	S
Switch type		End connection		Connection type
0 - Reed switch 2 wire type 2 - Solid state type, current sourcing (PNP) 3 - Solid state type, current sinking (NPN)		FL - 04 (Flying lead with 2 meter cable length) QD - 02 (Quick disconnecter with 300 mm cable length)		S - Straight type L - Angle type

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

Subject to change