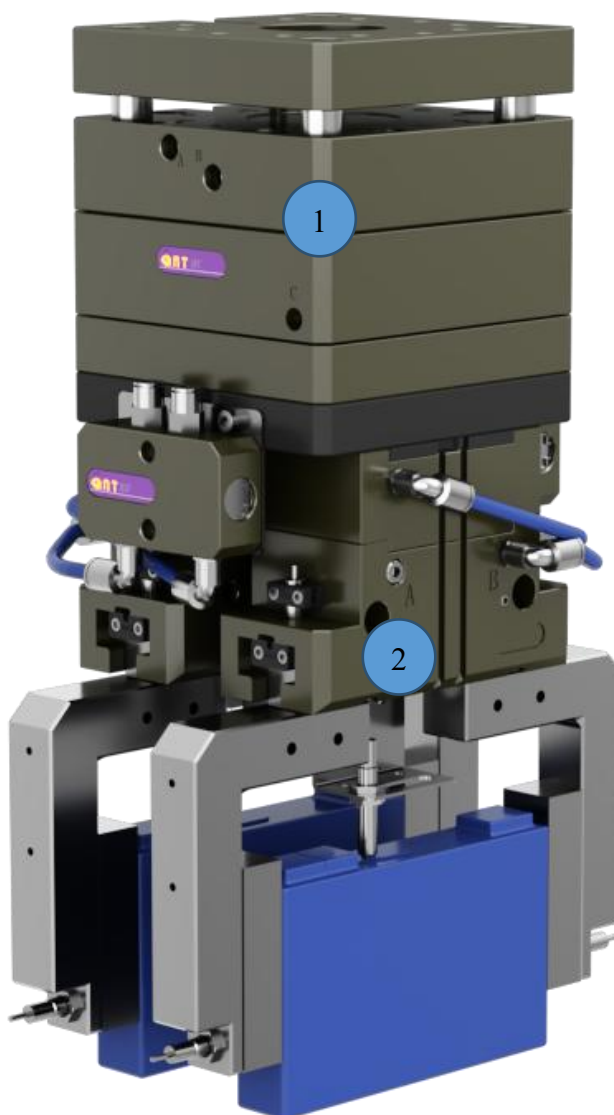

Sizes 5...250	Weight 1.6...55Kg	Compensation paths XY $\pm 3 \text{---} \pm 10\text{mm}$	Compensation paths Z $\pm 8 \text{---} \pm 12\text{mm}$	Rotation $\pm 5^\circ$	Workpiece weight 5...250Kg

应用案例 / Application example



① AFC 5-XY 精度补偿模块

AFC 5-XY Compensation Unit

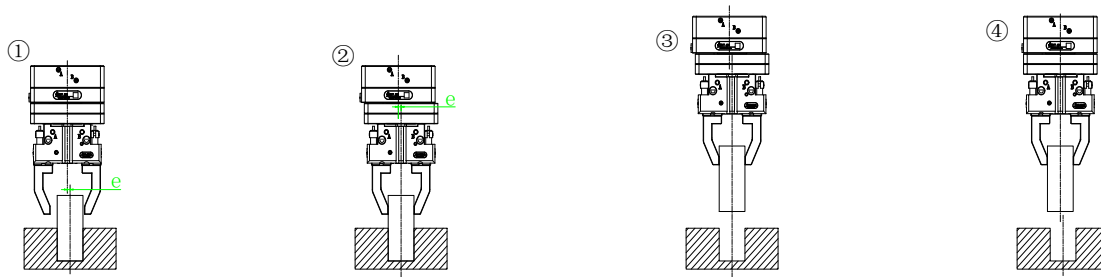
② AGN 125-NC 2指平动手爪

AGN 125-NC 2-Finger Gripper series

精度补偿模块/Compensation Unit

精度补偿模块适用于装配搬运等场合，AFC 精度补偿模块具有 XYZ 方向移动补偿和 Z 轴方向角度旋转补偿，适用于各种精度要求高的场合。

工作原理



- 1、装有补偿模块的机械抓手，移动至物料上方，工件中心线与手爪中心线不重合，偏心距 e ；
- 2、气口 B 通气，补偿装置处于浮动状态，手爪抓取工件，手爪轴心平行移动至与工件中心线处；
- 3、夹紧工件后，机械手沿 Z 轴方向运动，将工件从夹具中取出；
- 4、气孔 A 通气，抓取工件的手爪回到机械手中心位置；

传感系统 Sensor system

传感器 /Sensor (选购/Order)



型号(NO.)

	XY 补偿	Z 轴补偿
	检测传感器/Magnetic sensor	接近传感器/Proximity sensor
NPN	PD-S1-NPN	WPS-8GM18N
PNP	PD-S1-PNP	WPS-8GM18P

- 传感器成对使用
- 磁性传感器不适用于连接具有磁性的连接板或环境为磁场环境和环境温度大于 80°C 下使用
- Two sensors (NO contacts) are required for each swivel unit.
- The magnetic sensors are not suitable for connecting the magnetic plate or the environment is magnetic field and the temperature is greater than 80°C .

AFC



订购号/Order

产品型号/Type: AFC

规格/Size: 5/20/50/160/250

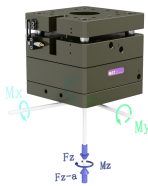
XY: XY轴向浮动

Non: 无Z轴向浮动
Z: Z轴向浮动

D: Z轴弹簧力配置1
E: Z轴弹簧力配置2

AFC 20 - XY - Z D

静态力和力矩/Static forces and torques



	AFC 5	AFC 20	AFC 50	AFC 160	AFC 250
M_x max.	10 Nm	66 Nm	240 Nm	500 Nm	800 Nm
M_y max.	10 Nm	66 Nm	240 Nm	500 Nm	800 Nm
M_z max.	10 Nm	50 Nm	120 Nm	220 Nm	300 Nm
F_z max.	60 N	250 N	1000 N	2000 N	3600 N
F_{z-a} max.	500 N	1200 N	2500 N	4000 N	5000 N

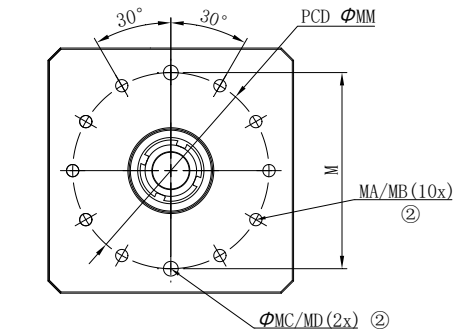
技术资料 Technical data

名称	单位	AFC 5-XY (-Z)	AFC 20-XY (-Z)	AFC 50-XY (-Z)	AFC 160-XY(-Z)	AFC 250-XY (-Z)	
负载重量 Recommend Payload weight	[Kg]	5	20	50	160	250	
XY 方向补偿 Compensation XY	[mm]	3	4	6	8	10	
绕 Z 轴最大旋转补偿角度 Max.rotary compensation angle	[°]	±25	±25	±20	±20	±20	
锁紧力 Locking force	[N]	420	1400	2500	5000	6000	
Z 方向补偿 Compensation Z	[mm]	8	8	10	10	12	
Z 方向补偿(选购) Compensation Z (Order)	无标记						
Z 方向最小弹簧力 Z-Min.spring force	[N]	29	105	160	210	310	
	配置-E	[N]	135	350	750	1000	1300
重复定位精度 Repeat accuracy	[mm]	±0.1	±0.1	±0.1	±0.1	±0.1	
重量 Weight	[Kg]	0.85	2.7	10.5	18	43	
	[Kg]	1.1	3.5	14	25	55	
空气消耗量 Air consumption per double stroke	cm ³	4.2	19	33.8	194	298	
	cm ³	8.6	27.6	61	210	342	
最小/大使用压力 Min....Max pressure	[bar]	3/8	3/8	3/8	3/8	3/8	
使用压力 Nominal pressure	[bar]	6	6	6	6	6	
适应最小/最大环境温度 Min./max. ambient temperature	[°C]	5~60	5~60	5~60	5~60	5~60	

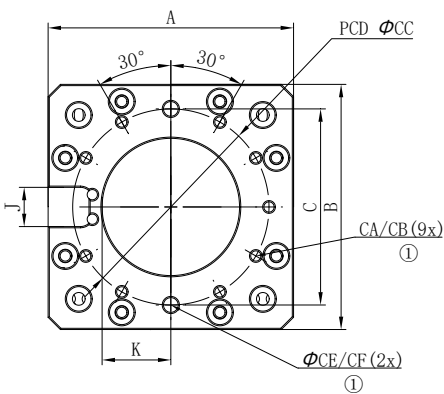
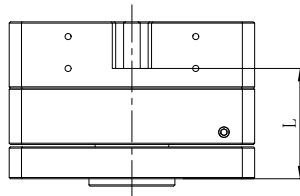
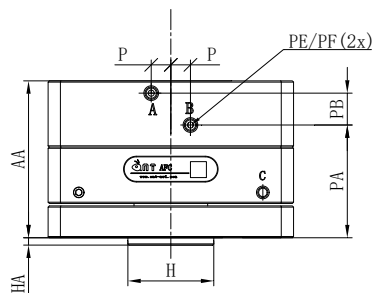
◇P: 空气压力[bar] *重复精度: 连续动作 100 次后检测值

◇P: Pressure [bar] *Repeat accuracy is defined as the spread of the limit position after 100 consecutive strokes

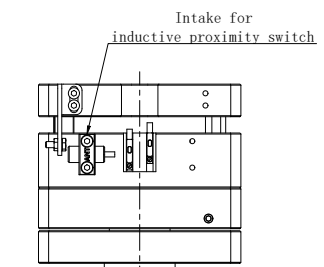
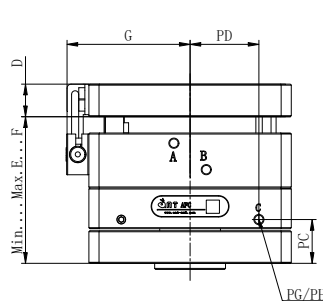
尺寸图/Dimensions



- A XY 锁定空气接口 Lock air connection
- B XY 浮动空气接口 Unlocked air connection
- C Z 浮动空气接口 Unlocked air connection
- ① Robot side connection
- ② Attachment connection

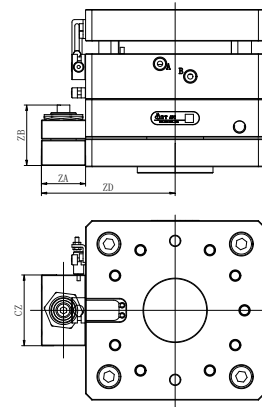


-Z 方向补偿/ Compensation Z



XY 轴向浮动行程调节装置 (选购)

XY axial compensation adjustment device (Order)



注: 适用型号 50 型号以上

XY 轴向浮动行程调节装置					
订购号 (Order No)	适配型号	ZA	ZB	ZC	ZD
CAFC-XY-50	AFC-50	35	37.5	56	106
CAFC-XY-160	AFC-160	35	37.5	56	170
CAFC-XY-250	AFC-250	35	37.5	56	170

	A	AA	B	C	CA	CB	CC	CE	CF	H	HA	J	K	L	M	MA	MB	MC	MD	MM	P	PA	PB	PE	PF
AFC 5-XY	70	52	70	45±0.02	M4	8	45	4H7	5	30h7	3	16	25	35	45±0.02	M4	8	4H7	5	45	5	38	9	M5	6
AFC 20-XY	100	64	100	80±0.02	M5	10	80	6H7	6	35h7	3	16	32	45	80±0.02	M5	10	6H7	6	80	8	46	13	M5	6
AFC 50-XY	142	99	142	110±0.02	M8	16	110	8H7	8	60h7	5	16	64	64.5	110±0.02	M8	16	8H7	8	110	12	71.5	10	G1/8	7
AFC 160-XY	210	136	210	160±0.02	M12	24	160	12H7	16	100h7	5	16	62	111	160±0.02	M12	24	12H7	16	160	12	118	8	G1/8	7
AFC 250-XY	270	153	270	200±0.02	M12	24	200	12H7	16	100h7	10	25	75	118	200±0.02	M12	24	12H7	16	200	16	126	16	G1/8	7

	D	E	F	G	PC	PD	PG	PH
AFC 5-XY-Z	12	52	60	45.8	15	19	M5	6
AFC 20-XY-Z	16	64	72	60.8	18.5	37.5	M5	6
AFC 50-XY-Z	25	99	109	99.8	31.5	51	G1/8	7
AFC 160-XY-Z	34	136	146	115.8	46	75	G1/8	7
AFC 250-XY-Z	35	153	165	145.8	43.5	100	G1/8	7