

# AIR CYLINDER

## Series A13, A14

Cat No A13, A14 - 01 - 01

### AIR CYLINDERS Double Acting ( Ø 200 ) mm

As per ISO 6431 / CETOP RP43P, RP53P standards

#### Features

- Adjustable cushioning at both ends.
- Wide varieties of mountings.
- Low friction.
- Long life.



#### Technical Specifications

Cylinder bore Ø ( mm )	200	
Cushion stroke ( mm )	40	
Standard strokes* ( mm )	50 80 100 125 160 200 250 300 320 400 500	
Medium	Compressed air - filtered - lubricated	
Working pressure	0.5 - 10 bar	
Medium temperature	5 ° - 60 ° c	
Materials of construction	Aluminium, Brass, Nitrile, Steel, Acetal, Iron, Bronze, polyurethane	
Mountings	Basic cylinder    Foot mounting    Front flange    Rear flange Male clevis      Female clevis    Centre trunnion	
Accessories	Clevis foot bracket    Wall mounting bracket    Trunnion bracket Rod end fork          Rod end spherical eye	

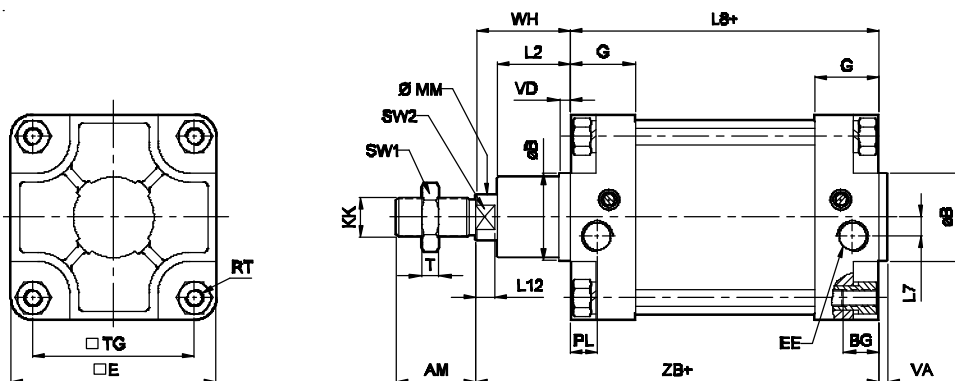
\* For Non standard or longer stroke cylinders , contact your regional dealer or **JANATICS**

#### Output force ( force in N: 1N = 0.1 kgf)

Cylinder bore (in mm)	Rod dia (in mm)		Working pressure in bar								
			2	3	4	5	6	7	8	9	10
Ø200	Ø40	Extend	5654	8482	11309	14137	16964	19792	22619	25446	28274
		Retract	5428	8143	10857	13571	16286	19000	21714	24429	27143

( Above values have been worked out taking frictional loss into consideration )

#### Basic cylinder



+ Add stroke

Cylinder bore Ø	KK	AM	MM	SW2	L12	SW1	T	B	VD	VA	L2	E	G	TG	RT	BG	EE	PL	L7	WH	ZB	L8	Stroke tol
200	M36 x 2	72	40	36	16	55	14	75	8	6	70	222	51	175	M16	24	G3/4	26	15	95	275 ± 1.5	180 ± 1.3	+4 0

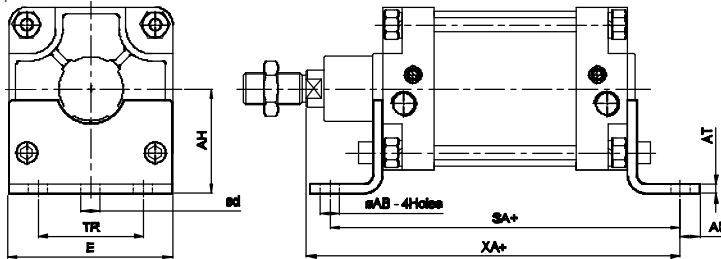
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## MOUNTINGS FOR AIR CYLINDER Series A14

### Foot mounting

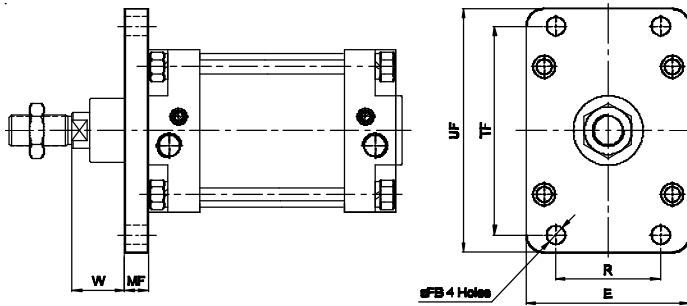


+ Add stroke

Cylinder bore Ø	TR ±0.3	AB H13	AH Js15 max.	AO	AT	E	SA ± 2	d*	XA ± 2
200	135	24	135	30	12	220	320	11.8	345

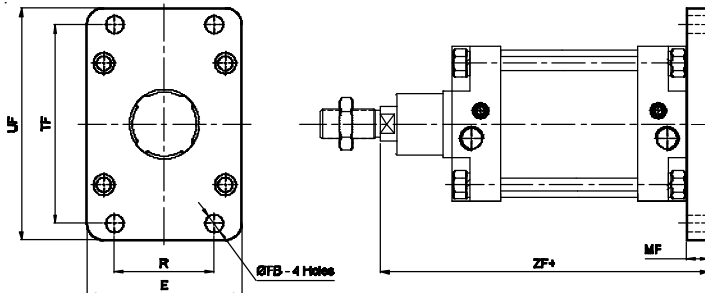
\* Suitable for reaming

### Front flange



Cylinder bore Ø	TF ± 0.3	R ± 0.3	FB H13	MF	UF	E	W ± 2.5
200	270	135	22	25	321	221	70

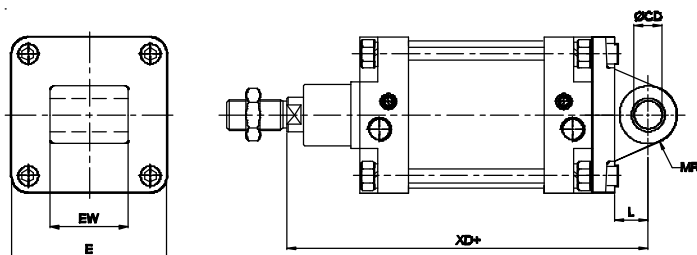
### Rear flange



+ Add stroke

Cylinder bore Ø	TF ± 0.3	R ± 0.3	FB H13	MF	UF	E	ZF ± 2
200	270	135	22	25	321	221	300

### Male clevis



+ Add stroke

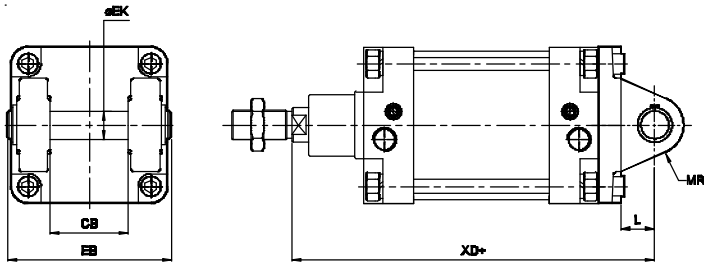
Cylinder bore Ø	CD H9	EW - 0.5 - 1.2	L min.	MR max.	E max.	XD ± 1.8
200	30	90	35	30	220	335

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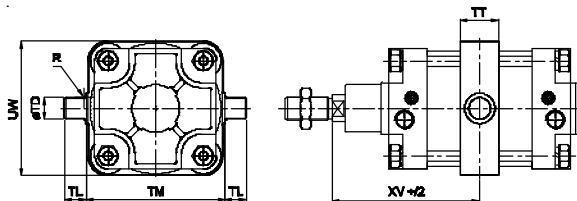
Cat No A13, A14 - 01 - 01

## Female clevis



Cylinder bore Ø	EK e8	L	MR	+ Add stroke		
				EB max.	CB H14	XD ± 1.8
200	30	35	31	191	90	335

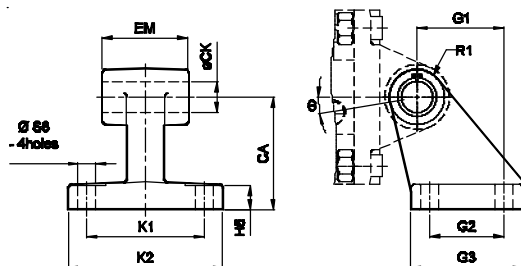
## Centre trunnion



Cylinder bore Ø	TD e9	TL h14	TM h14	UW	TT	+ Add stroke	
						R	XV ± 2.5
200	32	32	250	248	49	2.5	185

## ACCESSORIES FOR AIR CYLINDER Series A14

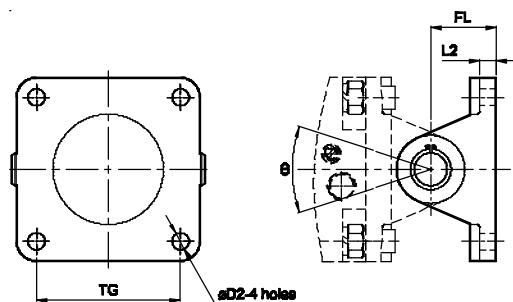
### Clevis foot bracket ( CETOP - RP 107 P )



Cylinder bore Ø	K1 Js14	G2 Js14	S6	CA Js16	CK H9	EM -0.6 -1.2	G1 ±0.3	H6	R1 max.	K2	G3	q°	Ordering no. @
200	122	90	18	135	30	90	105	30	31.5	162	130	13	AA0200

@ Adoptable to cylinder with female clevis

### Wall mounting bracket



Cylinder bore Ø	TG	D2	L2	FL	q°	Ordering no. @	Ordering no. #
200	175	17	11	60	90	AV0200	AW0200

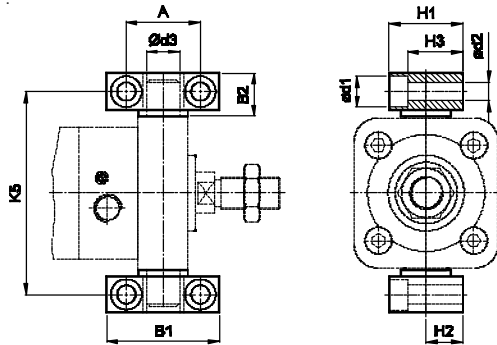
@ Adoptable to cylinder with male clevis  
# Adoptable to cylinder with female clevis

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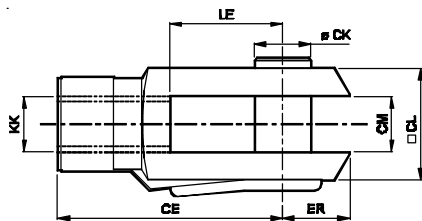
Cat No A13, A14 - 01 - 01

## Trunnion bracket



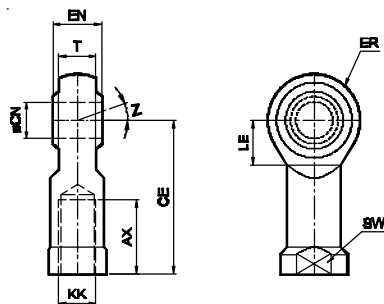
Cylinder bore $\varnothing$	B1	B2	A $\pm 0.2$	d1	d2 H13	d3 H9	H1	H2 $\pm 0.1$	H3	K5 Js14	Ordering no.
200	92	40	60	25	18	32	60	30	43	295	AT0160

## Rod end Fork ( ISO 8140 )



Cylinder bore $\varnothing$	KK	CE	CK f 8	CM B 12	LE	ER max.	CL	Ordering no.
200	M36 x 2	144	35	35	72	53	70	AF035

## Rod end spherical eye ( ISO 8139 )



Cylinder bore $\varnothing$	KK	CN H9	T	EN h12	CE	LE min	ER max	AX	SW	Z	Ordering no.
200	M36 x 2	35	28	43	125	41	40	56	50	15°	AP036

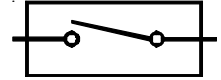
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Cat No A13, A14 - 01 - 01

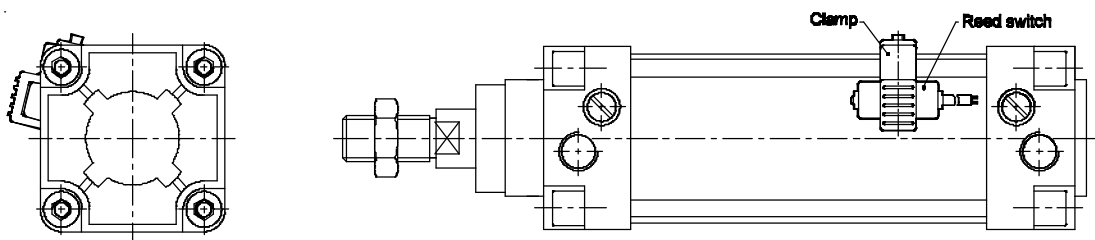
## ACCESSORIES FOR MAGNETIC CYLINDERS Series A13

### REED SWITCH



#### Function

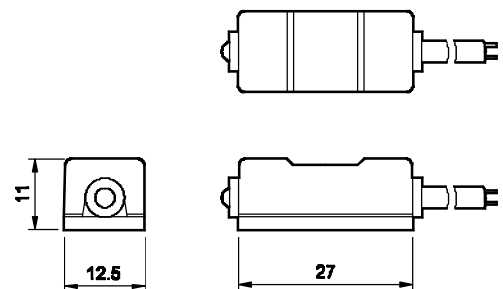
The reed switch and clamping kit assembly is mounted on the Air cylinder (Series A13), for proximity sensing. The piston of the cylinder is equipped with a permanent magnet which activates the reed switch on approaching it. The reed switch closes the circuit giving an electrical signal, which could be used further as required. The accuracy of the sensing distance depends on the speed of operation of the piston.



#### Technical Specifications - Reed Switch

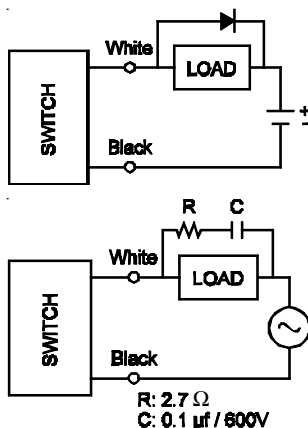
Model	880006
Operating voltage	DC / AC 4 – 240V
Switching current	5 – 40mA
Contact rating	6(3)* W, 8(4) VA
Voltage drop	2.5V max.
Response time	On + off <1ms
Switching logic	Normally open
Operating temperature	5° - 60° C
Type of protection	IP67
Colour of LED	Green
Cable	Ø 4, 2C

\* when load is inductive

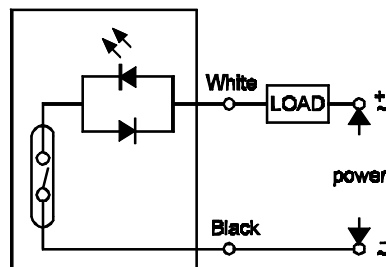


Cylinder bore Ø	Ordering no. for Clamp (a)	Ordering no. Reed Switch (b)	Ordering no. (a+b)
200	SA0007	880006	AM1200

#### External protect circuit



#### Circuit and connect diagram



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## How to order

Model		Cylinder bore (mm)		Stroke (mm)		Mountings	
13	Magnetic cylinder	200	- Ø 200	050	- 50	O	- Basic
14	Standard cylinder			080	- 80	L	- Foot Mounting
				100	- 100	F	- Front Flange
				125	- 125	R	- Rear Flange
				160	- 160	S	- Male Clevis
				200	- 200	D	- Female Clevis
				250	- 250	T	- Center Trunnion
				300	- 300		
				320	- 320		
				400	- 400		
				500	- 500		

### Example:

Ordering no. for standard cylinder with Ø200 bore, 50mm stroke with female clevis mounting: **A14 200 050 D**

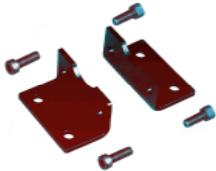

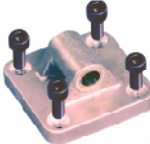
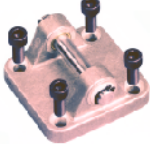
### Note:

If ordered as 200 dia, 50 mm stroke cylinder, Basic cylinder **A14 200 050 O** will be supplied.

For repeat order when the details are taken from cylinder nameplate, mention the mounting style separately.

For ordering **Accessories** refer corresponding tables for part numbers.

For ordering individual **Mounting** kits ( If needed separately ) the order numbers are as below

Cylinder bore Ø	Foot mounting	Front / Rear flange	Male clevis	Female clevis
				
200	ML0200	MF0200	MS0200	MD0200

For your special requirements of cylinders or for further informations contact your regional dealer or **JANATICS**