

## FEATURES

These stainless steel cylinders are designed for use in corrosive environments:

- chemical, salty or humid atmospheres
- food processing, dairy and meat industries: high resistance to lactic acid and bactericidal sprays

## GENERAL

<b>Detection</b>	<b>Equipped for magnetic position detectors</b>
<b>Operating pressure</b>	10 bar, max. [1 bar =100 kPa]
<b>Ambient temperature</b>	-20°C to +80°C
<b>Standards</b>	ISO 6431

fluids (*)	temperature range (TS)
air or inert gas filtered at 50 µm, lubricated or not	-20°C to +80°C

## MATERIALS IN CONTACT WITH FLUID

(\*) Ensure that the compatibility of the fluids in contact with the materials is verified

<b>Barrel</b>	Stainless steel, AISI 304
<b>Rod</b>	Stainless steel, AISI 303, AISI 316 L
<b>Rod seal</b>	FPM (fluoroelastomer)
<b>Front and rear ends</b>	Stainless steel, AISI 304
<b>Piston</b>	Light alloy - POM Acetal
<b>Piston seal</b>	PUR (polyurethane)
<b>Scraper seal</b>	FPM (fluoroelastomer), PTFE in option
<b>CONSTRUCTION</b>	
<b>Cushioning</b>	Adjustable pneumatic
<b>Dismounting</b>	Dismountable cylinder
<b>Rod nut</b>	Stainless steel, AISI 316 L
<b>Bearing</b>	Composite material



**B**

## HOW TO ORDER

### 15-DIGIT PRODUCT CODE

**G 431 A 5 3 K 0080 A00**

**Thread connection**  
G = ISO 16030

**Product series**  
431

**Revision letter**  
A = Initial release

**Diameter (mm)**  
3 = 32  
4 = 40  
5 = 50  
6 = 63  
8 = 80

**Rod options**  
3 = Single rod, Stainless steel  
4 = Through rod, Stainless steel  
6 = Single rod, AISI 316 L  
7 = Through rod, AISI 316 L

**Rod seal and rod scraper seal**  
K = FPM Rod Seal (Standard)  
P = FPM Rod Seal + PTFE Rod Scraper seal  
C = FPM Rod Seal + PTFE Detachable Rod Scraper seal Cartridge

### Options

- A00** = Single rod, Plain Front & Rear Covers
- PRC** = Single rod, Threaded Front Cover, Plain Rear Cover
- TRE** = Single rod, Plain Front Cover, Integral-Eye Rear End
- THR** = Through rod (Threaded Covers)

### Recommended standard strokes (mm) (1)

Ø mm	con-nect. Ø (G)	25	50	80	100	125	160	200	250	320	400	500	min. stroke	max. stroke
32	G1/8	●	●	●	●	●	●	●	●				20	1000
40	G1/4	●	●	●	●	●	●	●	●	●			20	1000
50	G1/4	●	●	●	●	●	●	●	●	●	●		30	1000
63	G3/8	●	●	●	●	●	●	●	●	●	●	●	30	1000
80	G3/8	●	●	●	●	●	●	●	●	●	●	●	30	1000

(1) Other strokes on request.

## POSITION DETECTORS

IP69K Magnetic position detector and stainless steel collars, see page P291

**INSTALLATION**

- The cylinders can be mounted in any position without affecting operation
- Stainless steel mountings: **catalogue number**

Ø (mm)	female rod clevis ISO 8140 AP2	spherical rod end ISO 8139 AP6	front neck nut MR3	feet MS1	cap, detachable eye (trunnion) MP4	cap, eye with spherical bearing MP6	cap, clevis for spherical eye
32	43400566	43400570	43400574	43400578	43400584	43400590	43400596
40	43400567	43400571	43400575	43400579	43400585	43400591	43400597
50	43400568	43400572	43400576	43400580	43400586	43400592	43400598
63	43400568	43400572	43400576	43400581	43400587	43400593	43400599
80	43400569	43400573	43400577	43400582	43400588	43400594	43400600

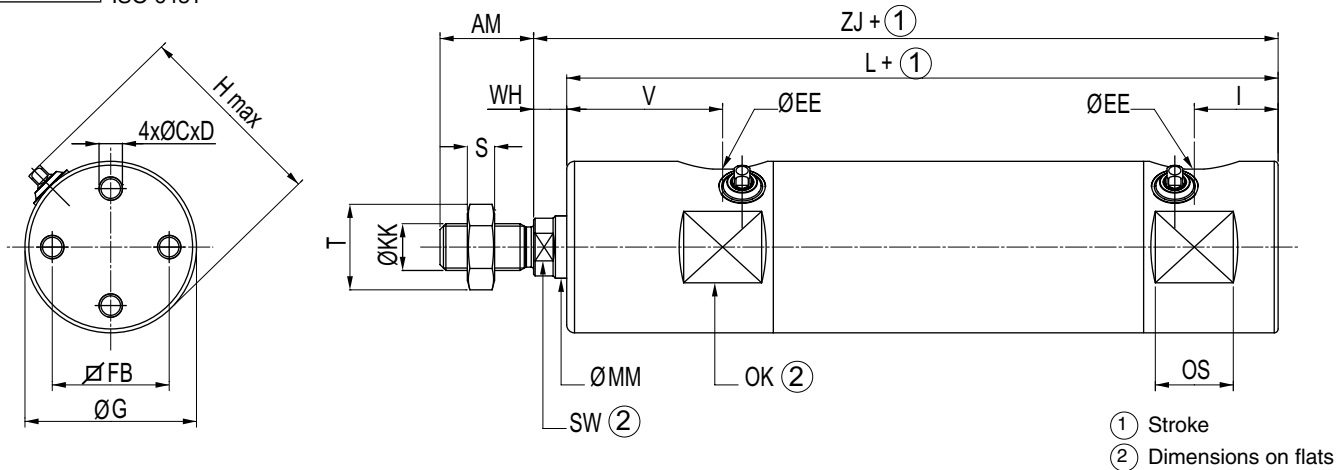
- Pipe connections 1/4-3/8-1/2 (G\*) have standard combination thread according to ISO 228/1 and ISO 7/1. Pipe connections G 1/8 have standard thread according to ISO 228/1
- Installation/maintenance instructions are included with each cylinder

**DIMENSIONS (mm)** 



**SINGLE-ROD TYPE CYLINDER**

Plain Front & Rear Covers (option: **A00**)  
 For detachable rear mounting  
 Supplied without front cover nut  
 ISO 6431

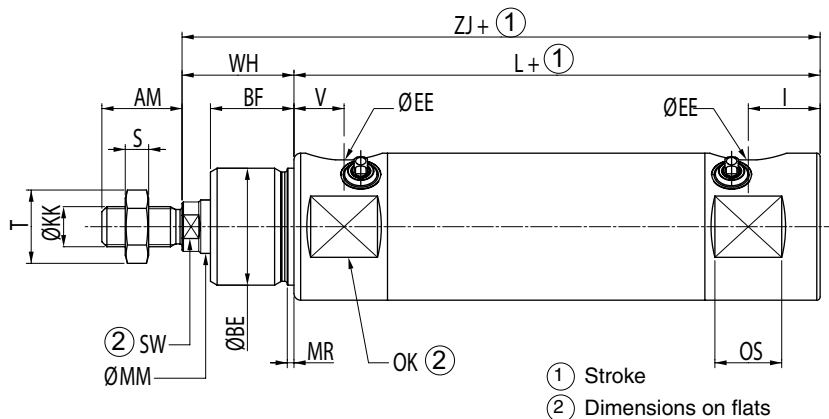
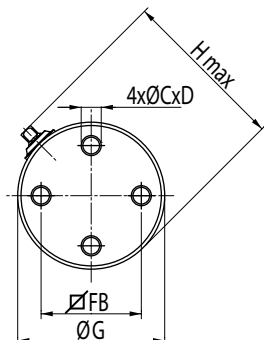


Ø (mm)	AM	C	D	ØEE	FB	G	H MAX	I	ØKK	L	MM	OK	OS	S	SW	T	V	WH	ZJ
32	22	M5	7	G1/8	25	36	44,70	17,5	M10x1,25	115,5	12	33	16,5	5	10	17	34	8	123,5
40	24	M6	8	G1/4	30	44	52,45	21,5	M12x1,25	132,5	16	40	20	6	13	19	40	8,5	141
50	32	M6	8	G1/4	39	54	62,45	19	M16x1,5	135	20	50	19	8	17	24	44,5	13	148
63	32	M8	8	G3/8	49	68	76,45	22,5	M16x1,5	151	20	64	24	8	17	24	44	13	164
80	40	M10	8,5	G3/8	64	86	94,60	25,5	M20x1,5	164	25	82	24	10	21	30	51	15,5	179,5

### DIMENSIONS (mm)

#### SINGLE-ROD TYPE CYLINDER

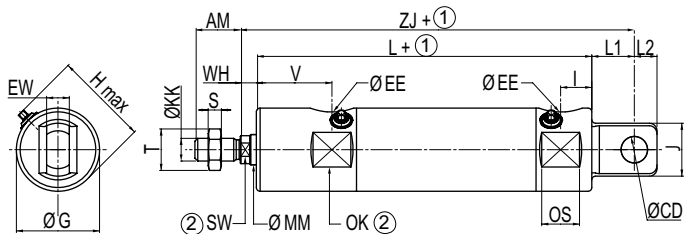
Threaded Front Cover, Plain Rear Cover (option: **PRC**)  
For detachable rear mounting  
Supplied without front cover nut  
ISO 6431



Ø (mm)	AM	BE	BF	C	D	ØEE	FB	G	H MAX	I	ØKK	L	MM	MR	OK	OS	S	SW	T	V	WH	ZJ
32	22	M30x1,5	22	M5	7	G1/8	25	36	44,70	17,5	M10x1,25	92,5	12	2	33	16,5	5	10	17	12	31	123,5
40	24	M35x1,5	25	M6	8	G1/4	30	44	52,45	21,5	M12x1,25	106,5	16	2	40	20	6	13	19	15	34,5	141
50	32	M42x1,5	28	M6	8	G1/4	39	54	62,45	19	M16x1,5	107	20	2	50	19	8	17	24	16,5	41	148
63	32	M42x1,5	28	M8	8	G3/8	49	68	76,45	22,5	M16x1,5	123	20	2	64	24	8	17	24	16	41	164
80	40	M50x2,0	28	M10	8,5	G3/8	64	86	94,60	25,5	M20x1,5	136	25	2	82	24	10	21	30	23	43,5	179,5

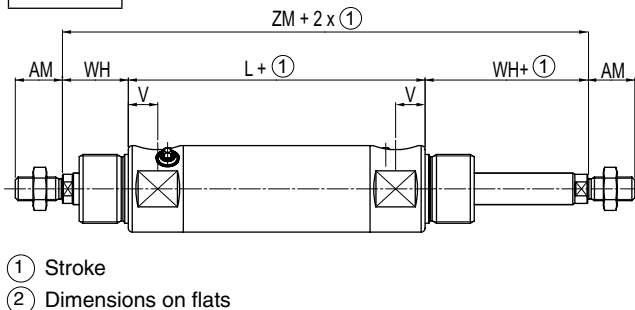
#### SINGLE-ROD TYPE CYLINDER

Plain Front Cover, Tenon Rear End (option: **TRE**)  
Supplied without front cover nut  
ISO 6431



#### THROUGH-ROD TYPE CYLINDER

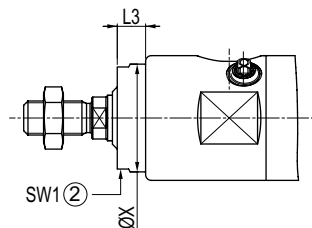
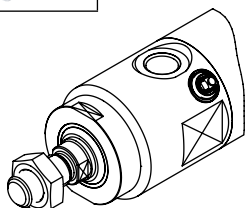
Threaded Covers (option: **THR**)  
ISO 15552-AFNOR - DIN



Ø (mm)	AM	ØCD	ØEE	G	H MAX	I	J	ØKK	L	L1	L2	EW	MM	OK	OS	S	SW	T	V	WH	ZJ	Ø (mm)	AM	L	V	WH	ZM
32	22	10	G1/8	36	44,70	12	24	M10x1,25	109	22,5	10	12	33	16,5	5	10	17	34	8	140,5	32	22	88	12	31	150	
40	24	12	G1/4	44	52,45	16,5	28	M12x1,25	126,5	22,5	12	16	40	20	6	13	19	40	8,5	158,5	40	24	101	15	34,5	170	
50	32	16	G1/4	54	62,45	15,5	30	M16x1,5	131,5	27	16	20	50	19	8	17	24	44,5	13	171,5	50	32	105,5	16,5	41	187,5	
63	32	16	G3/8	68	76,45	21,5	40	M16x1,5	150	27	16	20	64	24	8	17	24	44	13	190	63	32	117	16	41	199	
80	40	20	G3/8	86	94,60	20	50	M20x1,5	158,5	36	20	25	82	24	10	21	30	51	15,5	210	80	40	134,5	23	43,5	221,5	

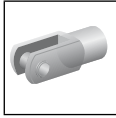
#### OPTION

PTFE Detachable Rod Scraper seal Cartridge

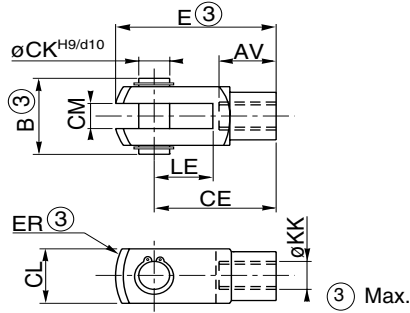


Ø (mm)	ØX	L3	SW1
32	31	5	27
40	38	5	36
50	40	5	36
63	40	5	36
80	53	5	46

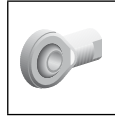
### DIMENSIONS (mm), WEIGHT (kg)



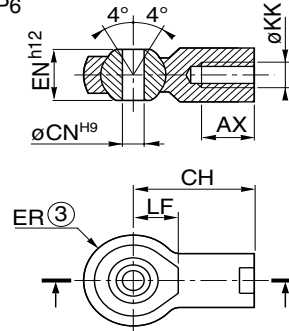
**MOUNTING**  
Female rod clevis  
ISO 8140  
AP2



∅ (mm)	AV	B	CE	CK	CL	CM	E	ER	KK	LE	weight
32	20	26	40	10	20	10	52	13	M10x1,25	20	0,09
40	23	31	48	12	24	12	62	15	M12x1,25	24	0,16
50	34	39	64	16	32	16	83	20	M16x1,5	32	0,31
63	34	39	64	16	32	16	83	20	M16x1,5	32	0,31
80	40	48	80	20	40	20	105	25	M20x1,5	40	0,67



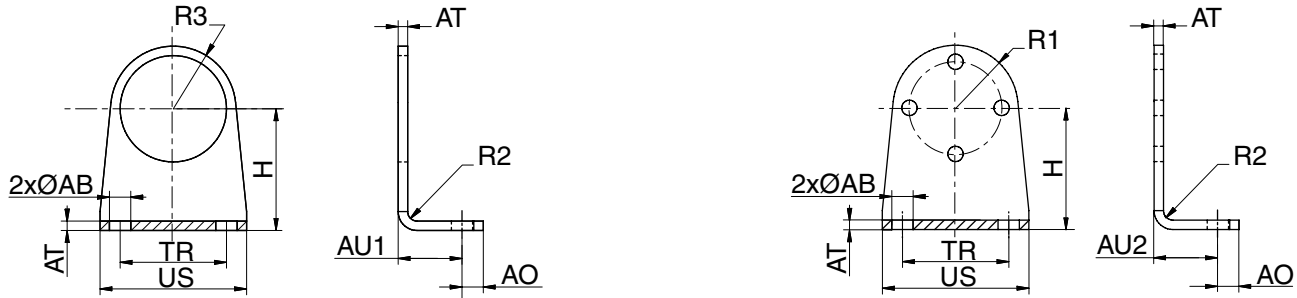
**MOUNTING**  
Spherical rod end  
ISO 8139  
AP6



∅ (mm)	AX	CH	CN	EN	ER	LF	KK	weight
32	20	43	10	14	13	14	M10x1,25	0,076
40	23	50	12	16	15	16	M12x1,25	0,115
50	34	64	16	21	20	22	M16x1,5	0,230
63	34	64	16	21	20	22	M16x1,5	0,230
80	40	77	20	25	25	26	M20x1,5	0,415

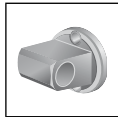


**MOUNTING**  
Feet  
MS1



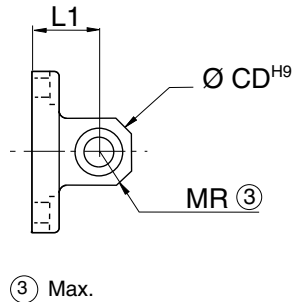
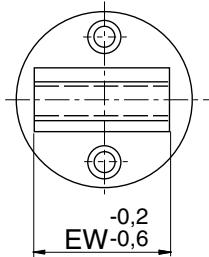
∅ (mm)	AB	AO	AU1	AU2	AT	H	R1	R2	R3	TR	US	weight
32	7	9	28,5	20,5	3	33	17,5	3	17,5	32	45	0,075
40	9	9	32	22	3	38	21,5	3	21,5	36	52	0,090
50	9	9	36	27	4	47	26,5	4	25	45	62	0,170
63	9	9	36	26	4	52	33	4	27	50	72	0,230
80	12	15	38,5	35,5	5	65	42,5	5	31	63	90	0,450

### DIMENSIONS (mm), WEIGHT (kg)

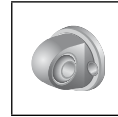


#### MOUNTING

Cap detachable eye (trunnion) mounting  
MP4

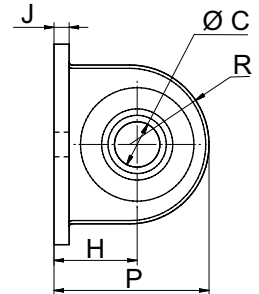
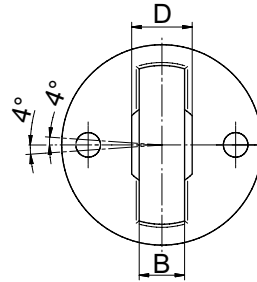


Ø (mm)	CD	EW	MR	L1	weight
32	10	26	11	18,5	0,08
40	12	28	13	19	0,10
50	12	32	13	22	0,17
63	16	40	17	26	0,32
80	16	50	17	30,5	0,58



#### MOUNTING

Cap, detachable eye mounting with spherical bearing  
MP6

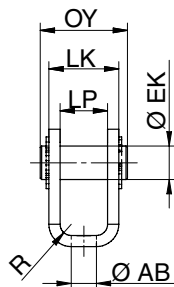
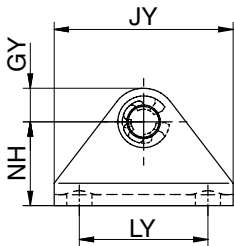


Ø (mm)	B	C	D	H	J	P	R	weight
32	10,5	10	14	18,5	3,5	33,5	15	0,09
40	12	12	16	19	3,5	37	18	0,14
50	12	12	16	22	5	44	22	0,22
63	15	16	21	26	5	48	22	0,34
80	15	16	21	30,5	8	55,5	25	0,60

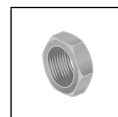


#### MOUNTING

Cap, clevis for spherical eye

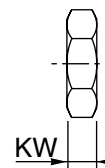
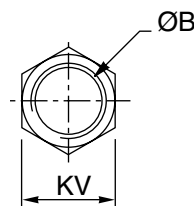


Ø (mm)	AB	EK	GY	JY	LK	LP	LY	NH	OY	R	weight
32	7	10	9	45	21	15	30	24	26	3	0,08
40	9	12	10	55	23	17	38	27	29	3	0,09
50	9	12	10	64	25	17	46	30	31	4	0,18
63	12	16	13	79	30	22	58	36	36	4	0,27
80	14	16	13	94	32	22	70	40	38	5	0,41



#### MOUNTING

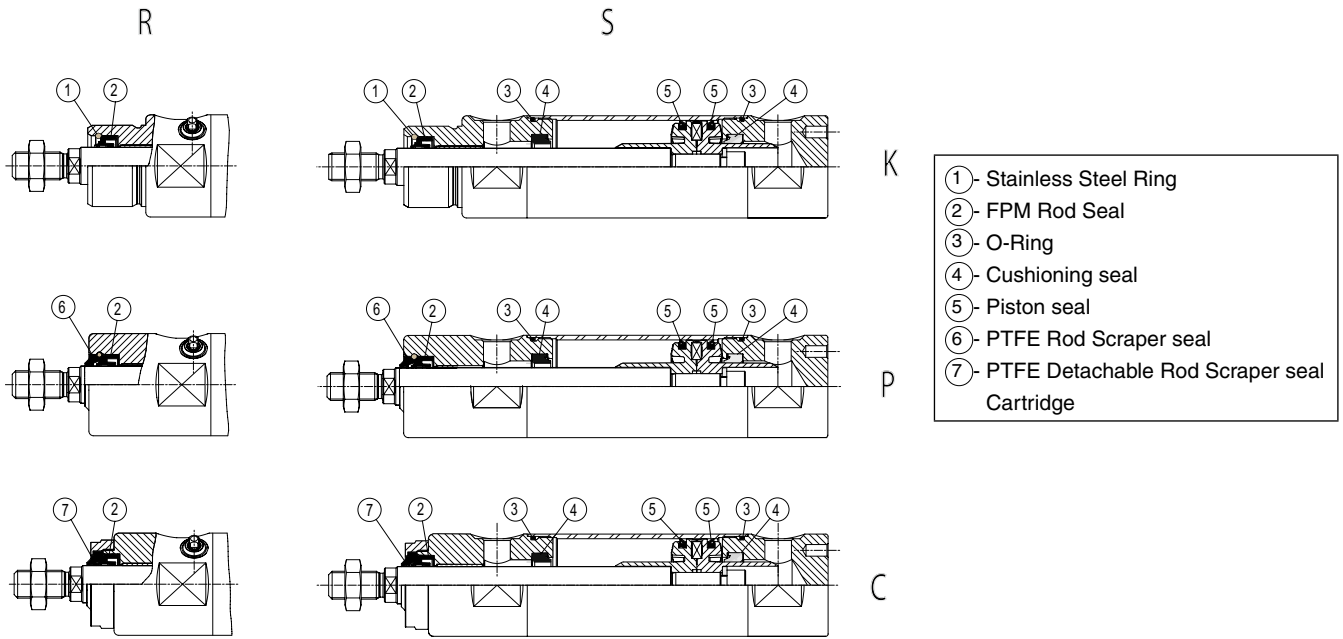
Front neck nut  
MR3



Ø (mm)	ØB	KV	KW	weight
32	M30x1,5	36	10	0,037
40	M35x1,5	41	10	0,043
50	M42x1,5	50	12	0,079
63	M42x1,5	50	12	0,079
80	M50x2	65	12	0,167

**B**

**SPARE PARTS KITS CODE**



**15-DIGIT PRODUCT CODE**

**M 431 A 5 S K 0000 A00**

**Spare Parts digit**  
M

**Product series**  
431

**Revision letter**  
A = Initial release

**Diameter (mm)**

- 3 = 32
- 4 = 40
- 5 = 50
- 6 = 63
- 8 = 80

**Rod seal and rod scraper seal**

**K** = FPM Rod Seal (Standard)

**P** = FPM Rod Seal + PTFE Rod Scraper seal

**C** = FPM Rod Seal + PTFE Detachable Rod Scraper seal Cartridge

**Type of kit**

**S** = Complete set of seals

**R** = Rod seals only



**PTFE Detachable Rod Scraper seal Cartridge**

Ø (mm)	SPARE PARTS KITS CODE PTFE Detachable Rod Scraper seal Cartridge
32	M431A3EC0000A00
40	M431A4EC0000A00
50-63	M431A5EC0000A00
80	M431A8EC0000A00