



***Prices effective  
September 1, 2011***

# **ISO CYLINDER (ISO 6431, VDMA24562)**

## **FAQR Series**



# FAQR Series ISO CYLINDER (ISO 6431,VDMA24562)



## Features

1. Magnetic piston is standard in all sizes.
2. Adjustable air cushions at both ends are standard in all sizes.
3. ISO 6431 dimensional interchange.
4. Machined male rod thread with jam nut is standard in all sizes.
5. Hard anodized aluminum cylinder tube I.D. & O.D. Painted end caps.
6. Cylinders can be operated with or without additional lubrication.
7. Position sensors ordered separately (see page 5). Mounting brackets fit over any of four extruded housing rails.

## How to order

FAQR	40	X	50	LB																								
Series	Bore (mm)		Stroke	Mounting																								
<b>FAQR</b> Standard type	Ø32		<b>Standard Strokes (mm) available for all bore sizes</b> <table><tr><td>25</td><td>450</td></tr><tr><td>50</td><td>500</td></tr><tr><td>75</td><td>550</td></tr><tr><td>100</td><td>600</td></tr><tr><td>125</td><td>650</td></tr><tr><td>150</td><td>700</td></tr><tr><td>175</td><td>750</td></tr><tr><td>200</td><td>800</td></tr><tr><td>250</td><td>850</td></tr><tr><td>300</td><td>900</td></tr><tr><td>350</td><td>950</td></tr><tr><td>400</td><td>1000</td></tr></table>	25	450	50	500	75	550	100	600	125	650	150	700	175	750	200	800	250	850	300	900	350	950	400	1000	
25	450																											
50	500																											
75	550																											
100	600																											
125	650																											
150	700																											
175	750																											
200	800																											
250	850																											
300	900																											
350	950																											
400	1000																											
	Ø40																											
	Ø50																											
	Ø63																											
	Ø80																											
	Ø100																											
	Ø125																											
<b>FAQRW</b> Double rod																												
			<i>Non-standard strokes are available on request</i>																									
				Tapped holes at both ends – leave blank																								
				<b>LB</b> Foot mount																								
				<b>TC</b> Trunnion																								
				<b>FA / FB</b> Front / rear flange																								
				<b>CA</b> Eye mount																								
				<b>CB</b> Pivot mount includes pin																								
				<b>CBB</b> Eye mount base combined with pivot mount (see pg. 6)																								

Non-standard strokes are available on request

## Specifications 150 psi max.

### Conversions

psi = kgf/cm<sup>2</sup> x 14.2  
psi = MPa x 145

inch = mm x 0.0394  
lb force = N x 0.22

Series	FAQR	FAQRW
<b>Action</b>	Single rod	Double rod
<b>Bore (mm)</b>	ø32, ø40, ø50, ø63, ø80, ø100, ø125	
<b>Operating media</b>	Compressed air	
<b>Min. Operating pressure</b>	0.07 MPa (0.7 kgf/cm <sup>2</sup> ) 10 psi	
<b>Max. Operating pressure</b>	1MPa (10.5 kgf/cm <sup>2</sup> ) 150 psi	
<b>Piston speed range</b>	50~500mm/sec. (1.97~19.7 in./sec.)	
<b>Temperature range</b>	-10°C (14°F) ~ +70°C (158°F) filtered dry air required at temperatures below 0°C (32°F)	
<b>Lubrication</b>	Not required or use ISO VG32	

### Effective Piston Areas

Bore (mm)	Push		Pull	
	cm <sup>2</sup>	in <sup>2</sup>	cm <sup>2</sup>	in <sup>2</sup>
32	8.0	1.25	6.9	1.1
40	12.6	1.95	10.6	1.64
50	19.6	3.04	16.4	2.56
63	31.2	4.83	28.0	4.35
80	50.3	7.79	45.4	7.03
100	78.5	12.17	73.6	11.4
125	122.7	19.0	113.1	17.5

### Conversions

Force lb = psi X in<sup>2</sup>  
N = lbf X 4.45

## Position Sensors



**9-2A197 Series Sensors**  
Order sensors, mounting brackets and cord sets separately. See page 5.

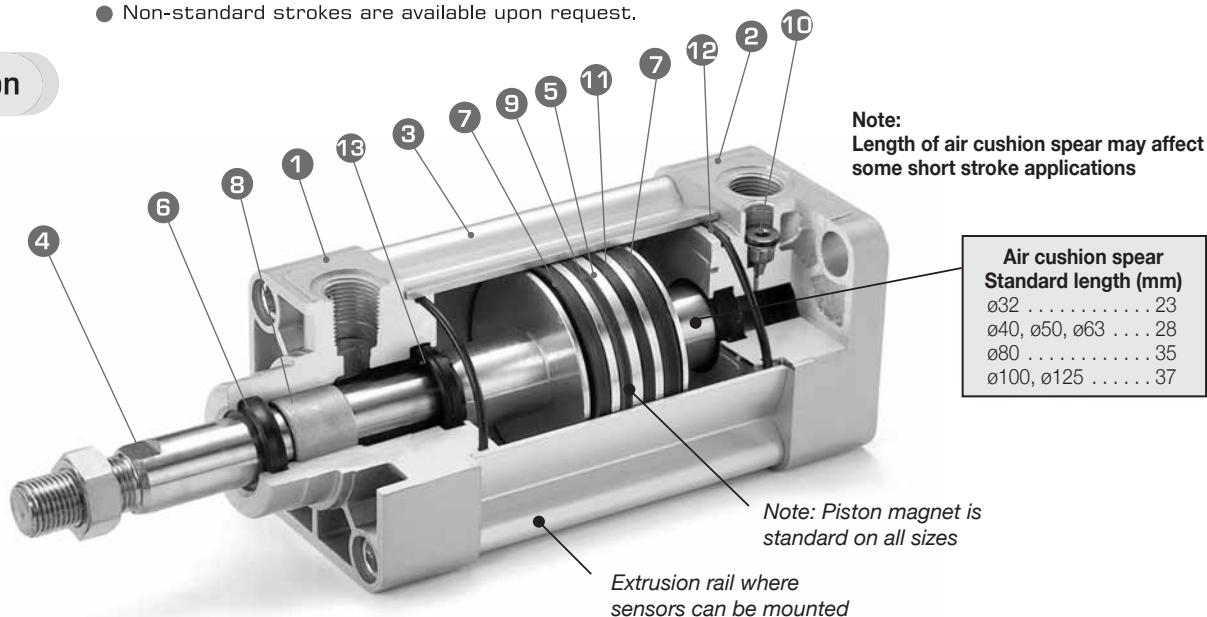
# FAQR Series ISO CYLINDER

## Standard strokes

Stroke Bore	25	50	75	100	125	150	175	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
ø32	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ø40	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ø50	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ø63	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ø80	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ø100	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ø125	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● Non-standard strokes are available upon request.

## Construction



### Position sensors (see page 5)

- Mounting – The sensor fits into a bracket that clamps rigidly to the extrusion rail and can be clamped anywhere along the length of the cylinder for very precise piston position sensing.
- Reliability – The annular piston magnet is permanently bonded into a groove in the piston. It is a polarized permanent magnet of rubber bonded barium ferrite that is very stable and is not affected by shock. Under normal usage it will remain magnetized indefinitely.
- Warning – External magnetic fields and/or ferrous objects may affect the strength of the piston magnet therefore affecting sensor actuation and piston position indication.
- Warning – Do not exceed sensor ratings. Permanent damage to sensor may occur. Power supply polarity MUST be observed for proper operation of sensors. See wiring diagrams included with each sensor.

## Part list

NO	Description	Material	Qty
1	Front end cover	Aluminum alloy (painted)	1
2	Rear end cover	Aluminum alloy (painted)	1
3	Barrel	Hard anodized aluminum alloy	1
4	Piston rod	Hard chrome plated carbon steel	1
5	Piston	Aluminum alloy	1
6	Piston rod seal	Nitrile - Buna N	1
7	Piston seal	Nitrile - Buna N	2
8	Rod bushing	Oil filled, sintered bronze	1
9	Magnet	Rubber bonded barium ferrite	1
10	Cushion screw	Plated carbon steel	2
11	Wear ring	Acetal	1
12	End cover seal	Nitrile - Buna N	2
13	Cushion ring	Nitrile - Buna N	2

## Seal kits

Bore	Complete Seal kits
ø32	FAQR32-SK
ø40	FAQR40-SK
ø50	FAQR50-SK
ø63	FAQR63-SK
ø80	FAQR80-SK
ø100	FAQR100-SK
ø125	FAQR125-SK

# FAQR Series Dimensions (mm)

## ISO CYLINDER (ISO 6431,VDMA24562)

### Price List

#### Cylinders (Weight conversion: lb = kg x 2.2)

Model #	Weight (kg)	Price	Model #	Weight (kg)	Price	Model #	Weight (kg)	Price	Model #	Weight (kg)	Price	Model #	Weight (kg)	Price
<b>FAQR32</b>			<b>FAQR40</b>			<b>FAQR50</b>			<b>FAQR63</b>			<b>FAQR80</b>		
" 25	0.6	\$57.15	" 25	0.88	\$60.50	" 25	1.32	\$76.80	" 25	1.86	\$89.90	" 25	2.76	\$135.60
" 50	0.66	60.50	" 50	0.98	62.10	" 50	1.5	80.05	" 50	2.0	93.15	" 50	2.96	142.10
" 75	0.72	62.10	" 75	1.08	65.35	" 75	1.68	83.30	" 75	2.14	98.00	" 75	3.16	147.00
" 100	0.78	65.35	" 100	1.18	68.60	" 100	1.86	86.55	" 100	2.28	102.90	" 100	3.36	151.95
" 125	0.84	68.60	" 125	1.28	70.25	" 125	2.04	89.90	" 125	2.42	106.20	" 125	3.56	158.45
" 150	0.9	70.25	" 150	1.38	73.50	" 150	2.22	93.15	" 150	2.56	111.10	" 150	3.76	163.40
" 175	0.96	73.50	" 175	1.48	76.80	" 175	2.4	96.40	" 175	2.7	115.95	" 175	3.96	168.25
" 200	1.02	76.80	" 200	1.58	78.45	" 200	2.58	99.65	" 200	2.84	119.30	" 200	4.16	191.10
" 250	1.14	83.80	" 250	1.78	84.95	" 250	2.94	107.85	" 250	3.12	129.05	" 250	4.56	204.15
" 300	1.26	89.90	" 300	1.98	93.15	" 300	3.3	115.95	" 300	3.4	137.25	" 300	4.96	218.85
" 350	1.38	96.40	" 350	2.18	99.65	" 350	3.66	122.55	" 350	3.68	145.35	" 350	5.36	231.95
" 400	1.5	102.90	" 400	2.38	106.20	" 400	4.02	130.65	" 400	3.96	160.05	" 400	5.76	245.00
" 450	1.62	109.45	" 450	2.58	112.70	" 450	4.38	138.85	" 450	4.24	163.40	" 450	6.16	258.10
" 500	1.74	115.95	" 500	2.78	119.30	" 500	4.74	145.35	" 500	4.52	171.50	" 500	6.56	274.40
" 550	1.86	135.60	" 550	2.98	138.85	" 550	5.1	169.90	" 550	4.8	200.90	" 550	6.96	315.25
" 600	1.98	142.10	" 600	3.18	145.35	" 600	5.46	178.10	" 600	5.08	210.75	" 600	7.36	329.95
" 650	2.1	150.30	" 650	3.38	153.55	" 650	5.82	187.85	" 650	5.36	220.50	" 650	7.76	344.65
" 700	2.22	158.45	" 700	3.58	161.70	" 700	6.18	196.05	" 700	5.64	230.30	" 700	8.16	357.75
" 750	2.34	165.00	" 750	3.78	168.25	" 750	6.54	204.15	" 750	5.92	240.15	" 750	8.56	372.45
" 800	2.46	173.15	" 800	3.98	176.40	" 800	6.9	212.35	" 800	6.2	249.90	" 800	8.96	387.15
" 850	2.58	181.35	" 850	4.18	184.60	" 850	7.26	220.50	" 850	6.48	259.70	" 850	9.36	400.20
" 900	2.7	187.85	" 900	4.38	191.10	" 900	7.62	230.30	" 900	6.76	269.55	" 900	9.76	416.55
" 950	2.82	196.05	" 950	4.58	199.30	" 950	7.98	238.50	" 950	7.04	279.35	" 950	10.16	429.60
" 1000	2.94	204.15	" 1000	4.78	207.50	" 1000	8.34	246.65	" 1000	7.32	289.10	" 1000	10.56	444.30
<b>FAQRW32</b>			<b>FAQRW40</b>			<b>FAQRW50</b>			<b>FAQRW63</b>			<b>FAQRW80</b>		
" 25	0.7	\$91.90	" 25	1.04	\$97.15	" 25	1.7	\$123.40	" 25	2.12	\$144.40	" 25	3.12	\$217.90
" 50	0.78	97.15	" 50	1.14	99.75	" 50	1.9	128.65	" 50	2.36	149.65	" 50	3.4	228.40
" 75	0.86	99.75	" 75	1.24	105.00	" 75	2.1	133.90	" 75	2.6	157.50	" 75	3.68	236.25
" 100	0.94	105.00	" 100	1.34	110.25	" 100	2.3	139.15	" 100	2.84	165.40	" 100	3.96	244.15
" 125	1.02	110.25	" 125	1.44	112.90	" 125	2.5	144.40	" 125	3.08	170.65	" 125	4.24	254.65
" 150	1.1	112.90	" 150	1.54	118.15	" 150	2.7	149.65	" 150	3.32	178.50	" 150	4.52	262.55
" 175	1.18	118.15	" 175	1.64	123.40	" 175	2.9	154.90	" 175	3.56	186.40	" 175	4.8	270.45
" 200	1.26	123.40	" 200	1.74	126.00	" 200	3.1	160.15	" 200	3.8	191.65	" 200	5.08	307.20
" 250	1.42	133.90	" 250	1.94	136.50	" 250	3.5	173.25	" 250	4.28	207.40	" 250	5.64	328.20
" 300	1.58	144.40	" 300	2.14	149.65	" 300	3.9	186.40	" 300	4.76	220.50	" 300	6.2	351.80
" 350	1.74	154.90	" 350	2.34	160.15	" 350	4.3	196.90	" 350	5.24	233.65	" 350	6.76	372.80
" 400	1.9	165.40	" 400	2.54	170.65	" 400	4.7	210.00	" 400	5.72	257.25	" 400	7.32	393.80
" 450	2.06	175.90	" 450	2.74	181.15	" 450	5.1	223.15	" 450	6.2	262.55	" 450	7.88	414.80
" 500	2.22	186.40	" 500	2.94	191.65	" 500	5.5	233.65	" 500	6.68	275.70	" 500	8.44	441.05
" 550	2.38	217.90	" 550	3.14	223.15	" 550	5.9	273.05	" 550	7.16	322.95	" 550	9.0	506.70
" 600	2.54	228.40	" 600	3.34	233.65	" 600	6.3	286.20	" 600	7.64	338.70	" 600	9.56	530.30
" 650	2.7	241.50	" 650	3.54	246.75	" 650	6.7	301.95	" 650	8.12	354.45	" 650	10.12	553.95
" 700	2.86	254.65	" 700	3.74	259.90	" 700	7.1	315.05	" 700	8.6	370.20	" 700	10.68	574.95
" 750	3.02	265.20	" 750	3.94	270.45	" 750	7.5	328.20	" 750	9.08	385.95	" 750	11.24	598.55
" 800	3.18	278.30	" 800	4.14	283.55	" 800	7.9	341.30	" 800	9.56	401.70	" 800	11.8	622.20
" 850	3.34	291.45	" 850	4.34	296.70	" 850	8.3	354.45	" 850	10.04	417.45	" 850	12.36	643.20
" 900	3.5	301.95	" 900	4.54	307.20	" 900	8.7	370.20	" 900	10.52	433.20	" 900	12.92	669.45
" 950	3.66	315.05	" 950	4.74	320.30	" 950	9.1	383.30	" 950	11.0	448.95	" 950	13.48	690.45
" 1000	3.82	328.20	" 1000	4.94	333.45	" 1000	9.5	396.45	" 1000	11.48	464.70	" 1000	14.04	714.05

#### Mounting options (no charge for standard tapped holes)

ø32 Bore		ø40 Bore		ø50 Bore		ø63 Bore		ø80 Bore	
Option	Price	Option	Price	Option	Price	Option	Price	Option	Price
LB	\$10.50	LB	\$11.35	LB	\$12.60	LB	\$15.10	LB	\$21.00
TC	41.60	TC	41.60	TC	45.35	TC	51.25	TC	70.15
FA or FB	11.95	FA or FB	12.60	FA or FB	15.35	FA or FB	17.45	FA or FB	24.55
CA	13.00	CA	14.70	CA	16.80	CA	20.60	CA	31.50
CB	14.70	CB	17.65	CB	20.15	CB	23.10	CB	40.75
CBB	30.05	CBB	34.00	CBB	41.15	CBB	44.95	CBB	79.60

# FAQR Series Dimensions (mm)

## ISO CYLINDER

### Price List

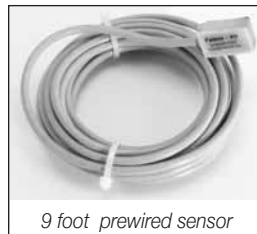
#### Cylinders (Weight conversion: lb = kg x 2.2)

Model #	Weight (kg)	Price	Model #	Weight (kg)	Price
<b>FAQR100</b>			<b>FAQR125</b>		
" 25	3.98	\$163.40	" 25	8.55	\$294.05
" 50	4.2	171.50	" 50	9	305.45
" 75	4.42	178.10	" 75	9.45	315.25
" 100	4.64	186.20	" 100	9.9	326.70
" 125	4.86	194.40	" 125	10.35	338.15
" 150	5.08	200.90	" 150	10.8	347.90
" 175	5.3	209.10	" 175	11.25	359.35
" 200	5.52	256.45	" 200	11.7	370.80
" 250	5.96	274.40	" 250	12.6	392.00
" 300	6.4	292.35	" 300	13.5	413.30
" 350	6.84	310.40	" 350	14.4	436.10
" 400	7.28	328.35	" 400	15.3	457.40
" 450	7.72	346.30	" 450	16.2	478.60
" 500	8.16	364.25	" 500	17.1	501.50
" 550	8.6	423.05	" 550	18	579.85
" 600	9.04	444.30	" 600	18.9	602.75
" 650	9.48	465.50	" 650	19.8	627.20
" 700	9.92	485.15	" 700	20.7	651.75
" 750	10.36	504.75	" 750	21.6	674.65
" 800	10.8	525.95	" 800	22.5	699.10
" 850	11.24	547.20	" 850	23.4	723.60
" 900	11.68	566.80	" 900	24.3	746.45
" 950	12.12	588.05	" 950	25.2	770.95
" 1000	12.56	607.65	" 1000	26.1	795.50
<b>FAQRW100</b>			<b>FAQRW125</b>		
" 25	3.86	\$262.55	" 25	7.32	\$472.55
" 50	4.18	275.70	" 50	7.9	490.55
" 75	4.5	286.20	" 75	8.48	506.70
" 100	4.82	299.30	" 100	9.06	525.05
" 125	5.14	312.45	" 125	9.64	543.45
" 150	5.46	322.95	" 150	10.22	559.20
" 175	5.78	336.05	" 175	10.8	577.55
" 200	6.1	412.20	" 200	11.38	595.95
" 250	6.74	441.05	" 250	12.54	630.05
" 300	7.38	469.95	" 300	13.7	664.20
" 350	8.02	498.80	" 350	14.86	700.95
" 400	8.66	527.70	" 400	16.02	735.05
" 450	9.3	556.55	" 450	17.18	769.20
" 500	9.94	585.45	" 500	18.34	805.95
" 550	10.58	679.95	" 550	19.5	931.95
" 600	11.22	714.05	" 600	20.66	968.70
" 650	11.86	748.20	" 650	21.82	1008.05
" 700	12.5	779.70	" 700	22.98	1047.45
" 750	13.14	811.20	" 750	24.14	1084.20
" 800	13.78	845.30	" 800	25.3	1123.55
" 850	14.42	879.45	" 850	26.46	1162.95
" 900	15.06	910.95	" 900	27.62	1199.70
" 950	15.7	945.05	" 950	28.78	1239.05
" 1000	16.34	976.55	" 1000	29.94	1278.45

#### Mounting options (standard tapped holes = N/C)

ø100 Bore		ø125 Bore	
Option	Price	Option	Price
LB	\$25.20	LB	\$46.20
TC	89.05	TC	121.80
FA or FB	29.40	FA or FB	43.45
CA	41.15	CA	49.15
CB	46.85	CB	49.15
CBB	93.85	CBB	107.10

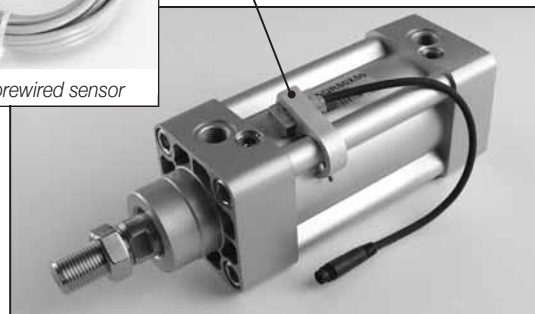
### Position Sensors



9 foot prewired sensor

Quick Disconnect Sensor has a 6" pigtail as shown in the photo below.

Sensor mounting bracket



#### Reed (LED)

5-120 VDC/VAC, 0.5 Amp Max., 10 Watt Max., SPST N.O., 3.5 Voltage Drop

##### Prewired 9 ft. Leadwire

Part No. ....Price  
9-2A197-1004.....\$27.10

##### Quick Disconnect\*

Part No. ....Price  
9-2A197-1304.....\$36.60

#### Electronic (LED)

Sourcing, PNP, 6-24 VDC, 0.5Amp Max., 1.0 Voltage Drop

##### Prewired 9 ft. Leadwire

Part No. ....Price  
9-2A197-1033.....33.65

##### Quick Disconnect\*

Part No. ....Price  
9-2A197-1333.....43.15

#### Electronic (LED)

Sinking, NPN, 6-24VDC, 0.5Amp Max., 1.0 Voltage Drop

##### Prewired 9 ft. Leadwire

Part No. ....Price  
9-2A197-1034.....33.65

##### Quick Disconnect\*

Part No. ....Price  
9-2A197-1334.....43.15

### Sensor brackets

Part No.	Fits Bore Sizes	Price
<b>849-D00-000</b>	ø32 & ø40	\$5.55
<b>849-300-000</b>	ø50, ø63, ø80 & ø100	5.55
<b>849-E00-000</b>	ø125	5.55

### Female Cord Sets

#### Cord length

<b>1 Meter</b>	
Part No.	Price
CFC-1M	\$15.05
<b>2 Meters</b>	
Part No.	Price
CFC-2M	16.85
<b>5 Meters</b>	
Part No.	Price
CFC-5M	21.30



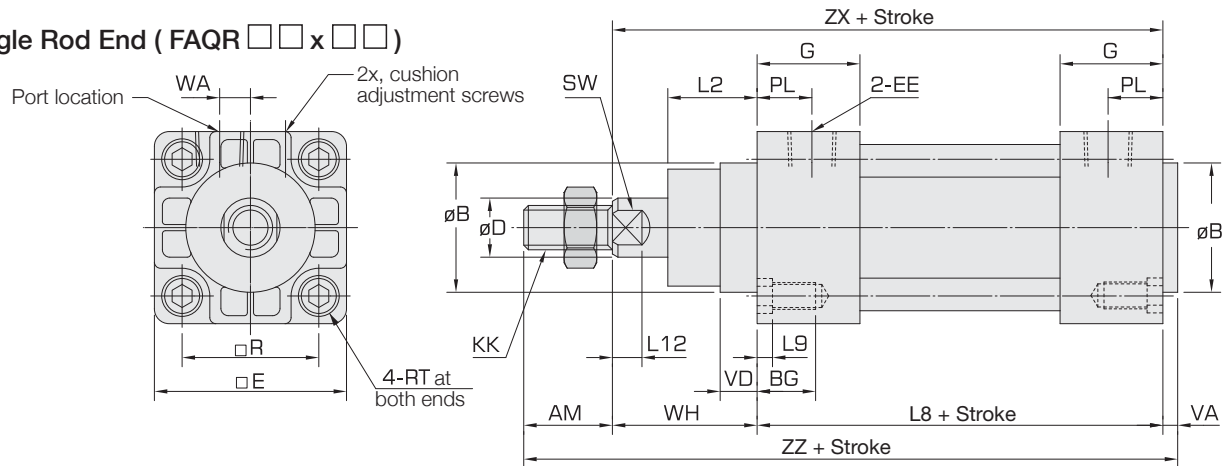
Female Cordsets available in 1, 2, & 5 meter lengths



# FAQR Series Dimensions (mm)

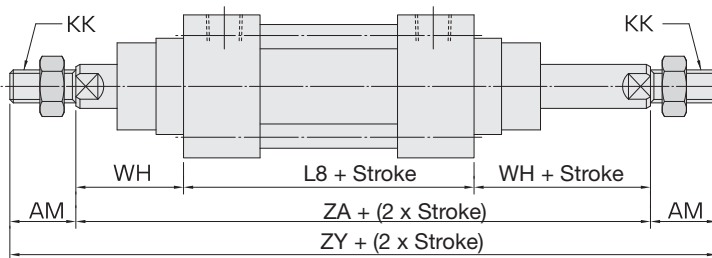
## ISO CYLINDER (ISO 6431,VDMA24562)

### Single Rod End ( FAQR □□ x □□ )



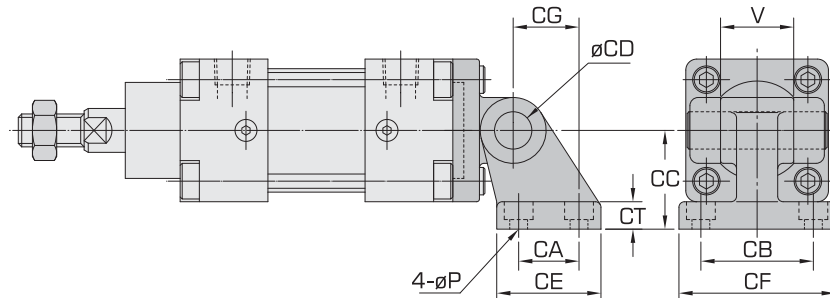
Bore	AM	øB	BG	øD	E	EE	G	KK	L2	L8	L9	L12	PL	R	RT	SW	VA	VD	WA	WH	ZX	ZZ
ø32	22	30	15	12	47	G1/8"	26	M10X1.25	16	94	6	6	10	32.5	M6	10	4	7	4	26	120	146
ø40	24	35	15	16	53	G1/4"	30	M12X1.25	20	105	6	8	15	38	M6	13	5	9	4	30	135	164
ø50	32	40	18	20	65	G1/4"	30	M16X1.5	25	106	6	8	15	46.5	M8	17	5	11	4	37	143	180
ø63	32	45	18	20	75	G3/8"	32	M16X1.5	25	121	6	8	16	56.5	M8	17	5	13	7	37	158	195
ø80	40	45	22	25	95	G3/8"	38	M20X1.5	32	128	6	10	19	72	M10	22	4	15	7	46	174	218
ø100	40	56	22	25	115	G1/2"	40	M20X1.5	34.5	138	6	10	19.75	89	M10	22	6	16	7	51	189	235
ø125	54	60	22	35	140	G1/2"	40	M27X2.0	40	160	6	15	16	110	M12	32	8	8	0	65	225	287

### Double Rod End ( FAQRW □□ x □□ )



Bore	AM	KK	L8	WH	ZA	ZY
ø32	22	M10X1.25	94	26	146	190
ø40	24	M12X1.25	105	30	165	213
ø50	32	M16X1.5	106	37	180	244
ø63	32	M16X1.5	121	37	195	259
ø80	40	M20X1.5	128	46	220	300
ø100	40	M20X1.5	138	51	240	320
ø125	54	M27X2.0	160	65	290	398

### Eye Mount Base combined with Pivot Mount and Pin (CBB)

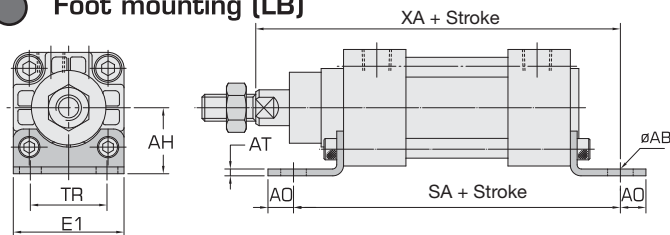


Bore	CA	CB	CC	øCD	CE	CF	CG	CT	V	øP
ø32	18	38	32	10	32	54	21	8	26	ø7thru hole, ø11c'bore, dp5
ø40	22	41	36	12	38	57	24	10	28	ø7thru hole, ø11c'bore, dp5
ø50	30	50	45	12	50	70	33	12	32	ø9thru hole, ø14c'bore, dp6
ø63	35	52	50	16	55	72	37	12	40	ø9thru hole, ø14c'bore, dp6
ø80	40	66	63	16	64	90	47	14	50	ø11thru hole, ø18c'bore, dp8
ø100	50	76	71	20	74	100	55	16	60	ø11thru hole, ø18c'bore, dp8
ø125	60	94	90	25	90	124	70	20	70	ø11thru hole, ø18c'bore, dp8

# FAQR Series Dimensions (mm)

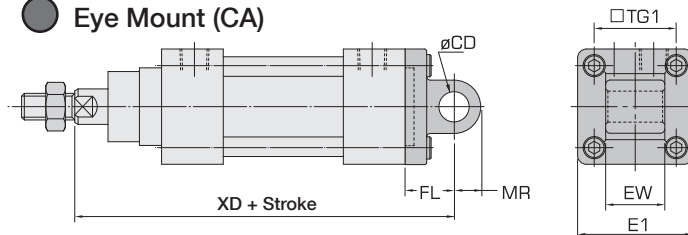
## ISO CYLINDER

### Foot mounting (LB)



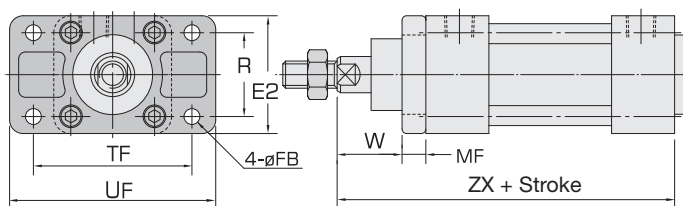
Bore	øAB	AH	AO	AT	E1	SA	TR	XA
ø32	7	32	8	5	47	142	32	144
ø40	9	36	10	5	53	161	36	163
ø50	9	45	10	5	65	170	45	175
ø63	9	50	10	5	75	185	50	190
ø80	12	63	13	6	95	210	63	215
ø100	14	71	15	6	115	220	75	230
ø125	16	90	25	8	140	250	90	270

### Eye Mount (CA)



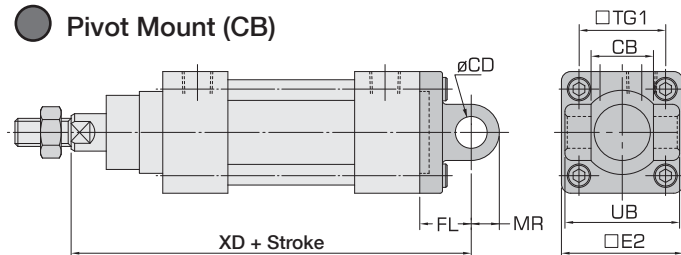
Bore	øCD	□E1	EW	FL	MR	□TG1	XD
ø32	10	47	26	22	10.5	32.5	142
ø40	12	53	28	25	13	38	160
ø50	12	65	32	27	13	46.5	170
ø63	16	75	40	32	17	56.5	190
ø80	16	95	50	36	17	72	210
ø100	20	115	60	41	21	89	230
ø125	25	140	70	50	25	110	275

### Front flange (FA)



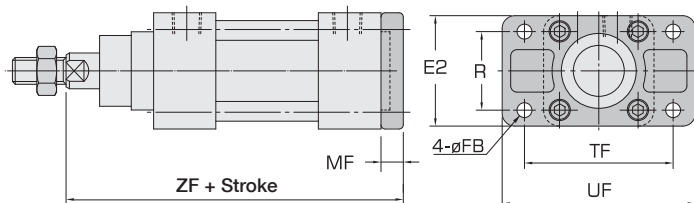
Bore	E2	FB	MF	R	TF	UF	W	ZX
ø32	50	7	10	32	64	79	16	120
ø40	55	9	10	36	72	90	20	135
ø50	65	9	12	45	90	110	25	143
ø63	75	9	12	50	100	120	25	158
ø80	95	12	16	63	126	153	30	174
ø100	120	14	16	75	150	178	35	189
ø125	140	16	20	90	180	220	45	225

### Pivot Mount (CB)



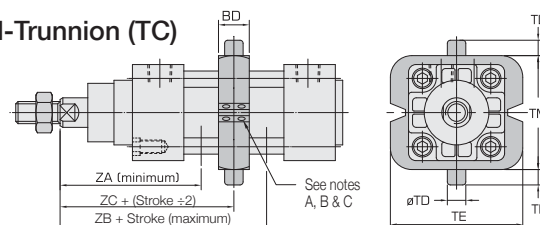
Bore	CB	øCD	□E2	FL	MR	□TG1	UB	XD
ø32	26	10	47	22	10.5	32.5	45	142
ø40	28	12	53	25	13	38	52	160
ø50	32	12	65	27	13	46.5	60	170
ø63	40	16	75	32	16	56.5	70	190
ø80	50	16	95	36	17	72	90	210
ø100	60	20	115	41	21	89	110	230
ø125	70	25	140	50	25	110	130	275

### Rear Flange (FB)



Bore	E2	FB	MF	R	TF	UF	ZF
ø32	50	7	10	32	64	79	130
ø40	55	9	10	36	72	90	145
ø50	65	9	12	45	90	110	155
ø63	75	9	12	50	100	120	170
ø80	95	12	16	63	126	153	190
ø100	120	14	16	75	150	178	205
ø125	140	16	20	90	180	220	245

### Mid-Trunnion (TC)



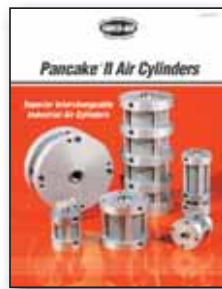
#### Notes

- A) 8x, set screws lock TC mount to extruded housing rails. Dim. 'ZC' is adjustable by the customer if necessary. Loosen set screws and adjust to desired position. Apply Loctite 242 (blue) to set screws and tighten.  
 B) TC mount may interfere with application of piston position sensors when using short strokes, sensing mid-stroke positions or if the TC mount is placed near either end-of-stroke.  
 C) ø125mm mount is plated steel and may affect magnetic field required for effective position sensing. Smaller size mounts are anodized aluminum. All trunnion pins are stainless steel.

Bore	BD	TD	TE	TL	TM	ZA	ZB	ZC
ø32	22	12	58	12	50	73	73	73
ø40	28	16	70	16	63	77	77	82.5
ø50	32	16	85	16	75	86	86	90
ø63	35	20	100	20	90	89.5	89.5	97.5
ø80	40	20	120	20	110	107	107	110
ø100	45	25	145	25	132	116.5	116.5	120
ø125	30	25	148	25	160	111	161	136



**Cylinders, Valves  
and Accessories**  
Catalog # CV9



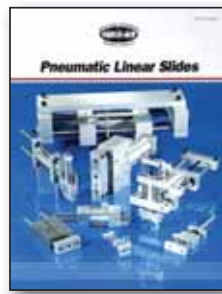
**Pancake® II Air Cylinders**  
Catalog # Pan2-2



**Square Pancake® II  
Air Cylinders**  
Catalog # SqPan2



**Multi-Power® Air Presses**  
Catalog # FP16



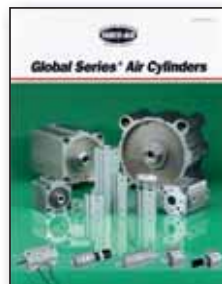
**Linear Slides - 6 Families**  
Catalog # LS-03



**Pneumatic Grippers,  
Parallel Jaw and Angular  
Motion - Catalog # GR-8**



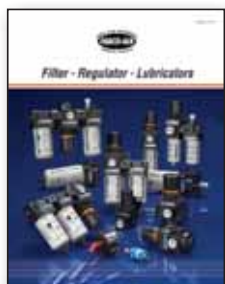
**Interchangeable  
NFPA Air Cylinders**  
Catalog # NF-6



**Global Series™ Metric Air  
Cylinders - Catalog # GC-15**



**Swing Clamps  
Bulletin # SC-DB04**



**Modular Air Preparation  
System - FRLs**  
Catalog # FRL-06



**Specialty & Control Valves**  
Catalog # 14CAN



**Stopper Cylinders**  
Catalog # ST-SC



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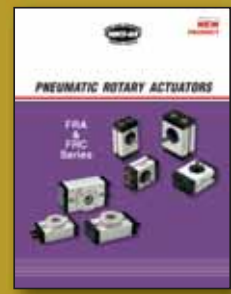
**ISO 6432 Cylinders**  
Catalog # FAE-09



**Twin Rod, Non-Rotating Air  
Cylinders - Catalog # FDF-09  
and Catalog # FDXS-09**



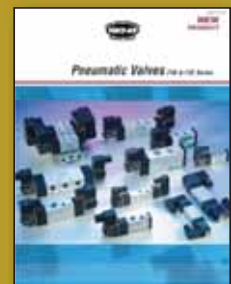
**Pneumatic Angular  
Motion Grippers**  
Catalog # FKA-09



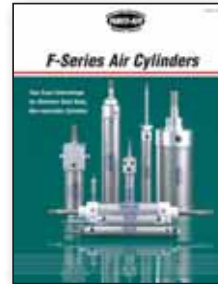
**Rotary Actuators, Pneumatic**  
Catalog # FRA.C-09



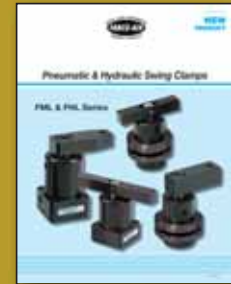
**Manifold Solenoid Valves**  
Catalog # FVS.Y-09



**Air Pilot & Solenoid Valves**  
Catalog # FVA.E-09



**Stainless Steel Body  
Air Cylinders**  
Catalog # SSB-03



**Pneumatic & Hydraulic  
Swing Clamps**  
Catalog # FML.H