



FUJIKURA COMPOSITES

Air bearing cylinder "AC" series

■ Features

- Air bearing is adopted for rod guide part.
- Since the rod and the guide are not in contact with each other, there is no frictional resistance and super precise control is possible. Also, there is no wear and dust generation.



■ Applications

- Precision pressure control not possible with conventional cylinders.
- Precision tension control of printing machines and plastic production equipment etc.

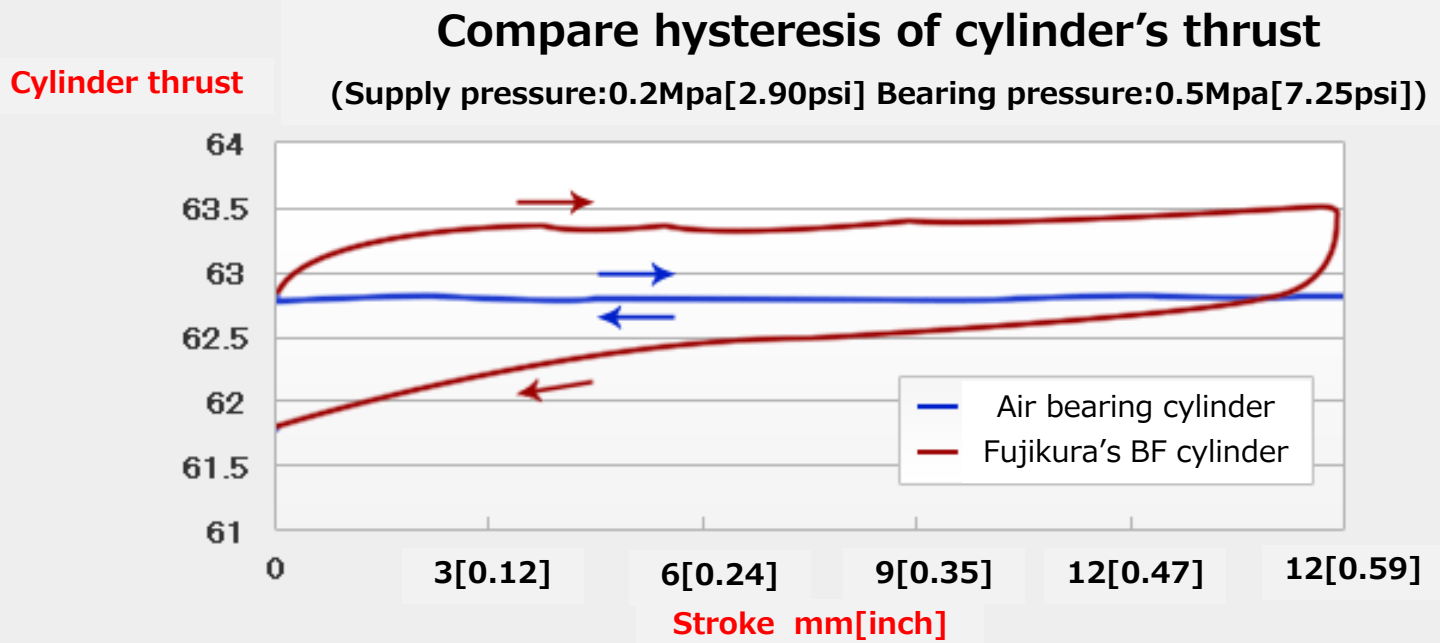
■ Specification

Operating Style	Single action (Push) / Double action
Cylinder Diameter (mm[in.])	10 ~ 63[0.39 ~ 2.48]
Stroke (mm[in.])	20 ~ 80[0.79 ~ 3.15]
Working Fluid	Clean compressed air (No lubricator)
Working Pressure Range (MPa[psi])	0.01~0.6 (※1) [1.5~87.0]
Working Temperature (°C[° F])	0~60[32~140]
Bearing type	Metal sintered body

*1The supply pressure to the air bearing should be at least +50kPa[7.25] working pressure.



■ Compare with BF cylinder



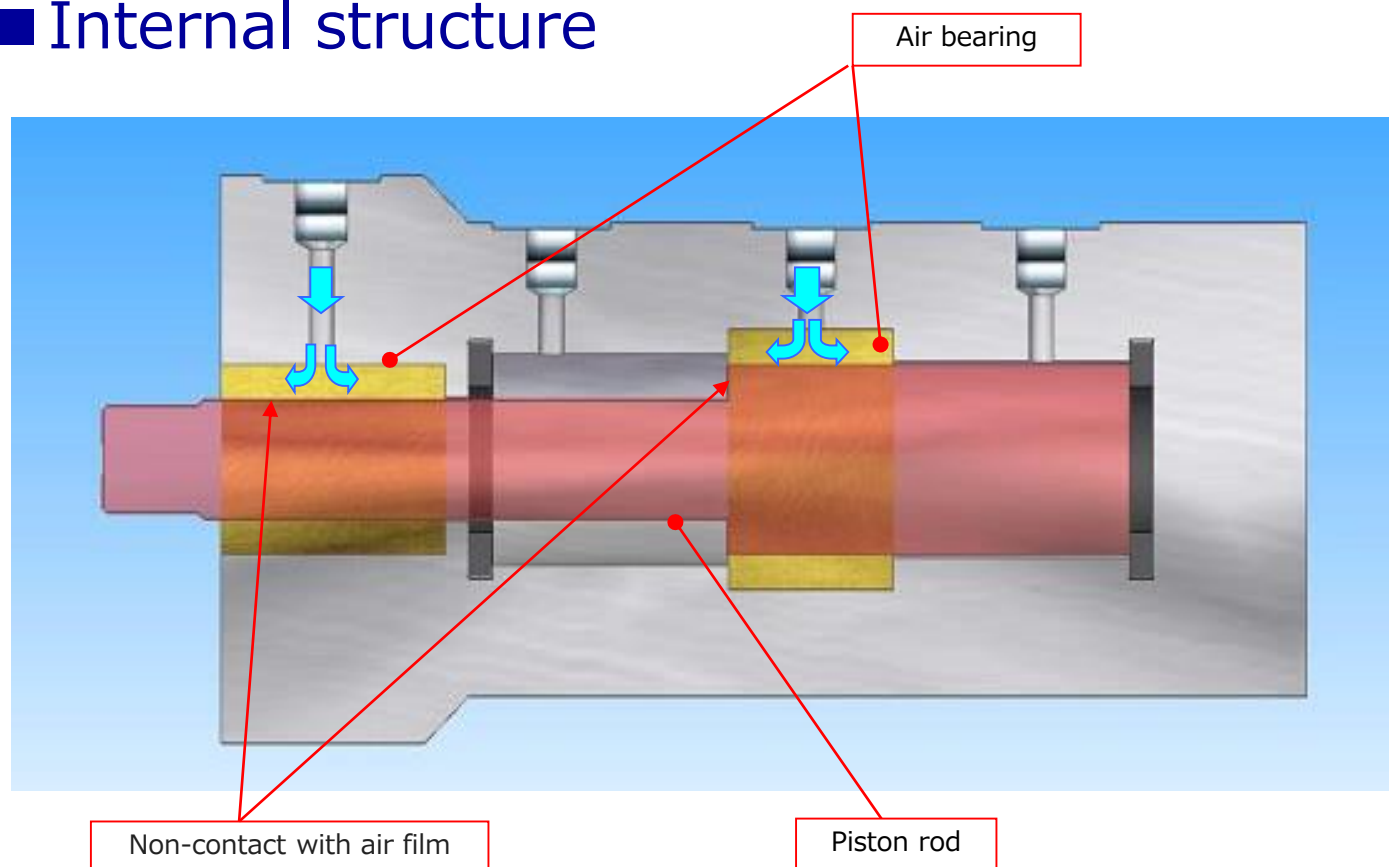
■ Model designation

ACD		10-20	
Operation style		Cylinder Diameter – Stroke	
ACS	Single Action (push)	mm	inch
ACD	Double Action	10-20	0.39-0.79
		12-20	0.47-0.79
		16-20	0.63-0.79
		20-30	0.79-1.18
		30-40	1.18-1.57
		40-60	1.57-2.36
		50-70	1.97-2.76
		63-80	2.48-3.15



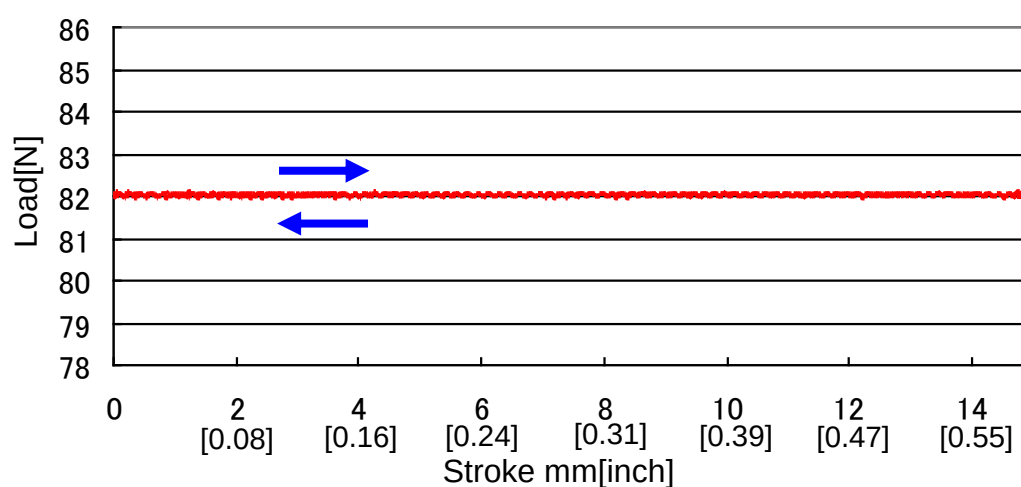
FUJIKURA COMPOSITES

■ Internal structure



■ Hysteresis Characteristic

Model ACS-16-20



Contact us

Control Equipment

Head office: GOTANDA JP BUILDING 4F, 8-4-13

Nishigotanda, Shinagawa-ku, Tokyo 141-0031, Japan

TEL +81-3-5747-9223

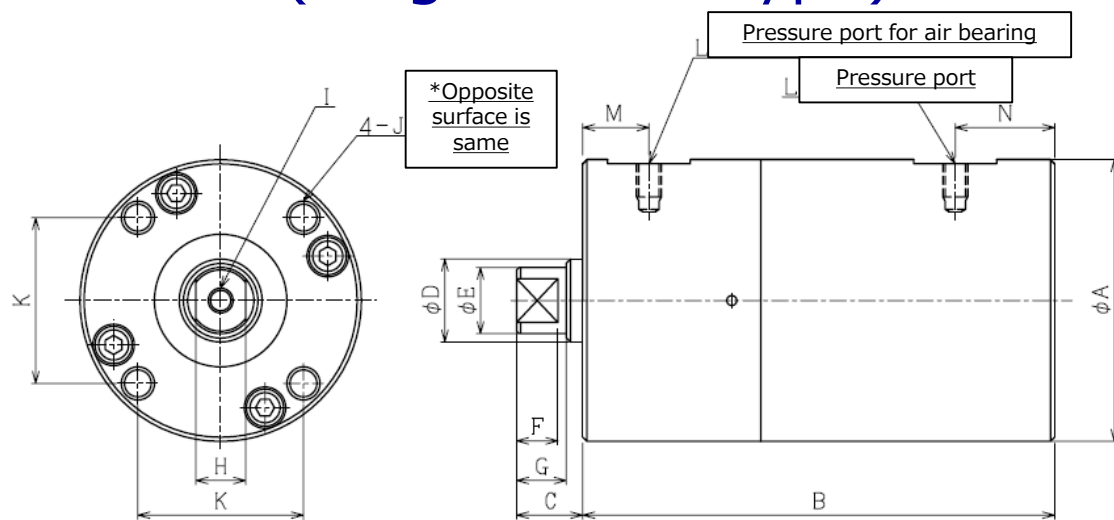
E-mail: seigyotoiawase.en@fc.fujikura.co.jp

URL: <http://www.fujikura-control.com/>



FUJIKURA COMPOSITES

■ Cylinder size(Single action type)



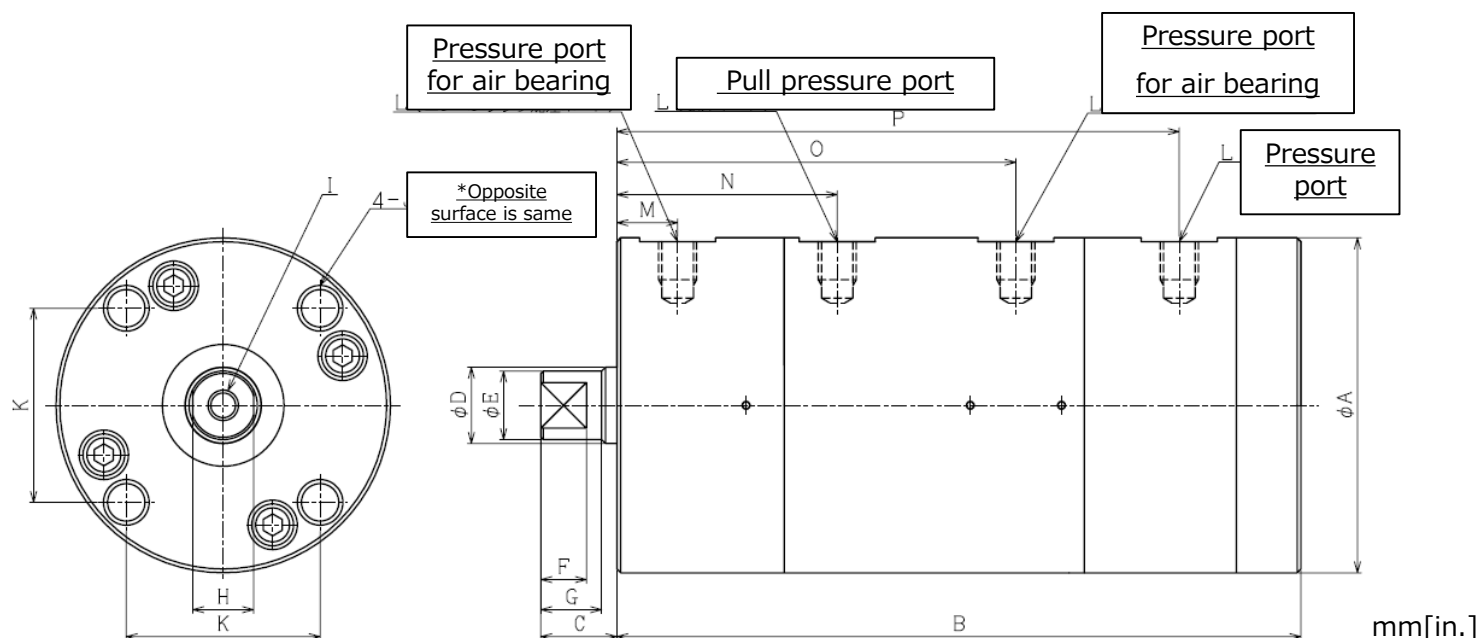
mm[in.]

Cylinder Diameter-Stroke	A	B	C	D	E	F	G	H (Two side width)	I	J	K	L	M	N
10-20 [0.39-0.79]	34 [1.34]	57 [2.24]	8 [0.31]	10 [0.39]	8 [0.31]	5 [0.20]	6 [0.24]	6 [0.24]	M3 Depth6 [0.24]	M4 Depth7 [0.28]	20 [0.79]	M3 Depth4 [0.16]	8 [0.31]	12 [0.47]
12-20 [0.47-0.79]	34 [1.34]	57 [2.24]	8 [0.31]	12 [0.47]	10 [0.39]	5 [0.20]	6 [0.24]	8 [0.31]	M3 Depth6 [0.24]	M4 Depth7 [0.28]	20 [0.79]	M3 Depth4 [0.16]	8 [0.31]	12 [0.47]
16-20 [0.63-0.79]	44 [1.73]	65 [2.56]	10 [0.39]	16 [0.63]	14 [0.55]	5 [0.20]	6 [0.24]	12 [0.47]	M4 Depth8 [0.31]	M6 Depth10 [0.39]	25.5 [1.00]	M5 Depth5 [0.20]	12 [0.47]	12 [0.47]
20-30 [0.79-1.18]	47 [1.85]	76.5 [3.01]	10 [0.39]	20 [0.59]	18 [0.71]	5 [0.20]	6 [0.24]	17 [0.67]	M5 Depth10 [0.39]	M6 Depth10 [0.39]	28 [1.10]	M5 Depth5 [0.20]	12.5 [0.49]	13 [0.51]
30-40 [1.18-1.57]	68 [2.68]	103.5 [4.07]	18 [0.71]	30 [1.18]	29 [1.14]	12 [0.47]	14 [0.55]	24 [0.94]	M6 Depth12 [0.47]	M6 Depth12 [0.47]	40 [1.57]	M5 Depth5 [0.20]	17 [0.67]	26.5 [1.04]
40-60 [1.57-2.36]	76 [2.99]	133.5 [5.26]	20 [0.79]	40 [1.57]	38 [1.50]	15 [0.59]	17 [0.67]	32 [1.26]	M8 Depth15 [0.59]	M6 Depth12 [0.47]	46 [1.81]	M5 Depth5 [0.20]	22 [0.87]	28.5 [1.12]
50-70 [1.97-2.76]	90 [3.54]	154 [6.06]	24 [0.94]	50 [1.97]	48 [1.89]	18 [0.71]	20 [0.79]	41 [1.61]	M10 Depth16 [0.63]	M6 Depth12 [0.47]	54 [2.13]	M5 Depth5 [0.20]	27 [1.06]	27.5 [1.08]
63-80 [2.48-3.15]	108 [4.25]	174 [6.85]	30 [1.18]	63 [2.48]	60 [2.36]	22 [0.87]	24 [0.94]	55 [2.17]	M12 Depth18 [0.71]	M8 Depth15 [0.59]	67 [2.64]	M5 Depth5 [0.20]	32 [1.26]	33 [1.30]



FUJIKURA COMPOSITES

■ Cylinder size(Double action type)



Cylinder Diameter-Stroke	A	B	C	D	E	F	G	H (Two side width)	I	J	K	L	M	N	O	P
16-20 [0.63-0.79]	44 [1.73]	90 [3.54]	10 [0.39]	10 [0.39]	9 [0.35]	6 [0.24]	8 [0.31]	8 [0.31]	M4 Depth8 [0.31]	M6 Depth8 [0.31]	25.5 [1.00]	M5 Depth5 [0.20]	8 [0.31]	28.5 [1.12]	52.5 [2.67]	74 [2.91]
20-30 [0.79-1.18]	47 [1.85]	114 [4.49]	10 [0.39]	10 [0.39]	9 [0.35]	6 [0.24]	8 [0.31]	8 [0.31]	M5 Depth10 [0.39]	M6 Depth10 [0.39]	28 [1.10]	M5 Depth5 [0.20]	8 [0.31]	29 [1.14]	62.5 [2.46]	95 [3.74]
30-40 [1.18-1.57]	68 [2.68]	158 [6.22]	20 [0.79]	20 [0.79]	19 [0.75]	8 [0.31]	10 [0.39]	16 [0.63]	M6 Depth12 [0.47]	M6 Depth12 [0.47]	40 [1.57]	M5 Depth5 [0.20]	12 [0.47]	37.5 [1.48]	85 [3.35]	131.5 [5.18]
40-60 [1.57-2.36]	76 [2.99]	206 [8.11]	20 [0.79]	20 [0.79]	19 [0.75]	8 [0.31]	10 [0.39]	16 [0.63]	M8 Depth15 [0.59]	M6 Depth12 [0.47]	46 [1.81]	M5 Depth5 [0.20]	12 [0.31]	37.5 [1.48]	108.5 [4.27]	179.5 [7.07]
50-70 [1.97-2.76]	90 [3.54]	242 [9.53]	25 [0.98]	30 [1.18]	29 [1.14]	12 [0.47]	15 [0.59]	24 [0.94]	M10 Depth16 [0.63]	M6 Depth12 [0.47]	54 [2.13]	M5 Depth5 [0.20]	17 [0.67]	50 [1.97]	132 [5.20]	214 [8.43]
63-80 [2.48-3.15]	108 [4.25]	276 [10.87]	25 [0.98]	30 [1.18]	29 [1.14]	12 [0.47]	15 [0.59]	24 [0.94]	M12 Depth18 [0.71]	M8 Depth15 [0.59]	67 [2.64]	M5 Depth5 [0.20]	17 [0.67]	50 [1.97]	147 [5.79]	247 [9.72]