

Field-Mate™ Series Agricultural Cylinders
 ASAE Interchangeable



HYDRO-LINE®

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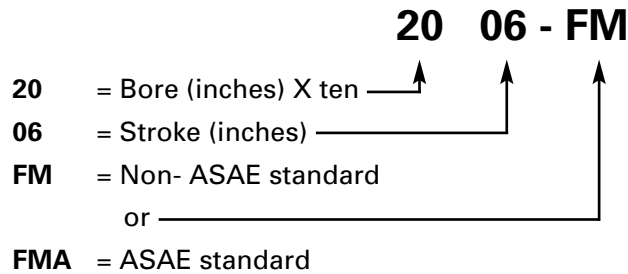
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How to Order a Field-Mate Cylinder

Field-Mate Model Number Explanation

EXAMPLE: Field-Mate Series
 2" Bore X 6" Stroke
 Non-ASAE

The model code designates standard rod and port sizes and standard side port position #2 (in line with the pins).

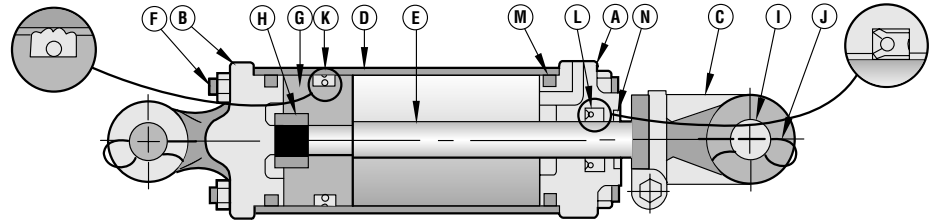


Cylinder Port Options and Rod Requirements by Stroke

Bore Dia.	Size & Type Ports	Standard Rods		Optional Rods	
	Standard	Dia.	Max. Stroke*	Dia.	Max. Stroke*
2	3/8 NPTF	1-1/8	24"	-	-
2-1/2	3/8 NPTF	1-1/8	16"	-	-
3	1/2 NPTF	1-1/4	22"	1-1/2	30"
3-1/2	1/2 NPTF	1-1/4	18"	1-1/2	24"
4	1/2 NPTF	1-1/4	12"	1-1/2	24"
5	1/2 NPTF	1-1/2	36"	2	46"
				-	-

*At 2500 PSI rated operating pressure. Longer strokes are possible at reduced pressure. Consult Eaton for maximum stroke at given pressure. Stroke limitation applies to compressive loading only.

Field-Mate Design Features and Specifications



Specifications

Bore Sizes: 2" - 5"

Pressure Ratings:

2500 PSI maximum operating pressure

4000 PSI maximum shock and surge pressure

NPTF ports are standard

Features

- A** Ductile iron head casting for high strength
- B** Ductile iron cap clevis casting for high strength
- C** Removable ductile iron clevis with lock-screw locking device
- D** Precision honed steel tubing for long seal life and positive sealing
- E** Polished hard chrome plated rod for extended seal life
- F** Heavy-duty high tensile strength tie rods with rolled threads
- G** One-piece, high strength ductile iron piston for strength and bearing characteristics
- H** High-strength self-locking piston nut
- I** Plated pins are standard for greater corrosion protection
- J** Heavy gauge plated spring clips are standard
- K** Glass filled Teflon* piston seal with o-ring expander for longer life
- L** Heavy-duty Urethane rod seal with o-ring expander for long life
- M** O-ring tube seals with back-up rings for positive sealing
- N** Tough urethane rod wiper for extended rod seal life
- O** Cylinders are marked with part number and date of manufacture for permanent identification
- P** Standard cylinder color is black

Available Model Codes

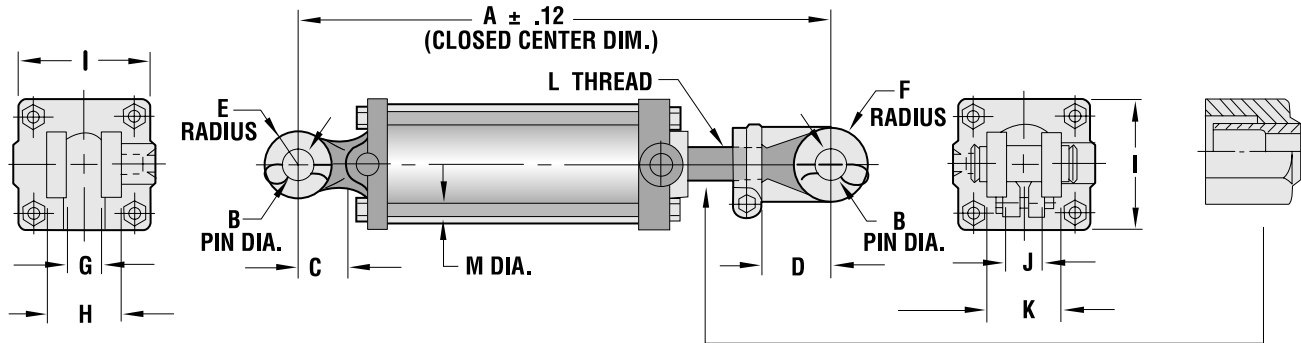
Field-Mate Part Number	Bore & Stroke	Pin to Pin	Rod Diameter	Weight LBS
2006-FM	2 x 6	16-1/4	1-1/8	17
2008-FM	2 x 8	18-1/4	1-1/8	17
2008-FMA	2 x 8	20-1/4	1-1/8	17
2010-FM	2 x 10	20-1/4	1-1/8	20
2012-FM	2 x 12	22-1/4	1-1/8	21
2016-FM	2 x 16	26-1/4	1-1/8	23
2024-FM	2 x 24	34-1/4	1-1/8	27
2508-FMA	2-1/2 x 8	20-1/4	1-1/8	21
2512-FM	2-1/2 x 12	22-1/4	1-1/8	24
2516-FM	2-1/2 x 16	26-1/4	1-1/8	27
3008-FM	3 x 8	18-1/4	1-1/4	25
3008-FMA	3 x 8	20-1/4	1-1/4	26
3010-FM	3 x 10	20-1/4	1-1/4	27
3012-FM	3 x 12	22-1/4	1-1/4	29
3014-FM	3 x 14	24-1/4	1-1/4	31
3016-FM	3 x 16	26-1/4	1-1/4	33
3016-FMA	3 x 16	31-1/2	1-1/4	34
3024-FM	3 x 24	34-1/4	1-1/2	41
3508-FMA	3-1/2 x 8	20-1/4	1-1/4	29
3510-FM	3-1/2 x 10	20-1/4	1-1/4	30
3516-FM	3-1/2 x 16	26-1/4	1-1/4	36
3516-FMA	3-1/2 x 16	31-1/2	1-1/2	37
3524-FM	3-1/2 x 24	34-1/4	1-1/2	51
4008-FMA	4 x 8	20-1/4	1-1/4	35
4010-FM	4 x 10	20-1/4	1-1/4	38
4016-FM	4 x 16	26-1/4	1-1/2	46
4016-FMA	4 x 16	31-1/2	2	47
4024-FM-1.5	4 x 24	34-1/4	1-1/2	63
4024-FM-2	4 x 24	34-1/4	2	67
5008-FMA	5 x 8	20-1/4	1-1/2	87

All dimensions in inches.

*Teflon is a trademark of DuPont.

Field-Mate ASAE Standard Cylinder Dimensions

All 8" stroke, 2"- 5" bore cylinders and all 16" stroke, 3"- 5" bore cylinders conform to ASAE standards as shown in the charts below.



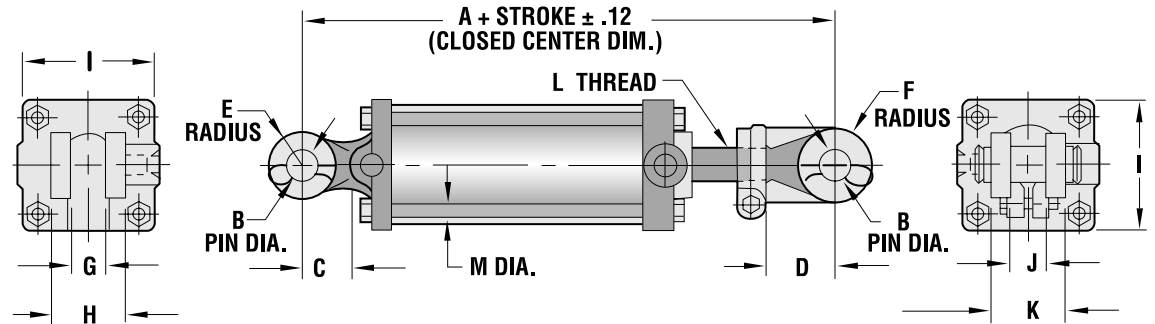
Bore Dia.	*2 (50.8)	*2.5 (63.5)	*3 (76.2)	*3.5 (88.9)	*4 (101.6)	**5 (127)	3 (76.2)	3.5 (88.9)	4 (101.6)	**5 (127)
Stroke	8 (203.2)	8 (203.2)	8 (203.2)	8 (203.2)	8 (203.2)	8 (203.2)	16 (406.4)	16 (406.4)	16 (406.4)	16 (406.4)
Port Size & Type	3/8 NPTF	3/8 NPTF	1/2 NPTF	1/2 NPTF	1/2 NPTF	1/2 NPTF	1/2 NPTF	1/2 NPTF	1/2 NPTF	1/2 NPTF
Rod Dia.	1.125 (28.575)	1.125 (28.575)	1.250 (31.750)	1.250 (31.750)	1.250 (31.750)	1.500 (38.100)	1.250 (31.750)	1.500 (38.100)	2.000 (50.800)	2.000 (50.800)
A	20.250 (514.350)	20.250 (514.350)	20.250 (514.350)	20.250 (514.350)	20.250 (514.350)	20.250 (514.350)	31.500 (800.100)	31.500 (800.100)	31.500 (800.100)	31.500 (800.100)
B	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	**1.000 (25.400)	1.250 (31.750)	1.250 (31.750)	1.250 (31.750)	1.250 (31.750)
C	1.625 (41.275)	1.625 (41.275)	1.625 (41.275)	1.625 (41.275)	2.000 (50.800)	2.313 (58.750)	1.625 (41.275)	1.625 (41.275)	2.000 (50.800)	2.313 (58.750)
D	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)
E	.875 (22.225)	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	1.125 (28.575)	1.500 (38.100)	1.000 (25.400)	1.000 (25.400)	1.125 (28.575)	1.500 (38.100)
F	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	1.250 (31.750)	1.000 (25.400)	1.250 (31.750)	1.250 (31.750)	1.250 (31.750)
G	1.125 (28.575)	1.125 (28.575)	1.125 (28.575)	1.250 (31.750)	1.250 (31.750)	1.375 (34.925)	1.125 (28.575)	1.250 (31.750)	1.250 (31.750)	1.375 (34.925)
H	2.500 (63.500)	2.625 (66.675)	2.625 (66.675)	2.750 (69.850)	2.875 (73.025)	3.500 (88.900)	2.625 (66.675)	2.750 (69.850)	2.875 (73.025)	3.500 (88.900)
I	2.875 (73.025)	3.250 (82.550)	3.750 (95.250)	4.250 (107.950)	5.000 (127.00)	6.000 (152.400)	3.750 (95.250)	4.250 (107.950)	5.000 (127.000)	6.000 (152.400)
J	1.125 (28.575)	1.125 (28.575)	1.125 (28.575)	1.125 (28.575)	1.125 (28.575)	1.250 (31.750)	1.125 (28.575)	1.250 (31.750)	1.250 (31.750)	1.250 (31.750)
K	2.625 (66.675)	2.625 (66.675)	2.625 (66.675)	2.625 (66.675)	2.625 (66.675)	2.750 (69.850)	2.625 (66.675)	2.750 (69.850)	2.750 (69.850)	2.750 (69.850)
L	1 1/16- 12	1 1/16- 12	1 1/4- 12	1 1/4- 12	1 1/4- 12	1 1/2- 12	1 1/4- 12	1 1/4- 12	1 1/4- 12	1 1/2- 12
M	.375 (9.525)	.375 (9.525)	.500 (12.700)	.563 (14.300)	.625 (15.875)	.750 (19.050)	.500 (12.700)	.563 (14.300)	.625 (15.875)	.750 (19.050)

All dimensions in inches (mm).

*Mechanical depth stop option is available for these sizes.

**1500 PSI maximum operating pressure.

Field-Mate Non-ASAE Series Cylinder Dimensions



Bore Dia.	2.000 (50.800)	2.500 (63.500)	3.000 (76.200)	3.500 (88.900)	4.000 (101.600)	5.000 (127.000)
A	10.250 (260.35)	10.250 (260.35)	10.250 (260.35)	10.250 (260.35)	10.625 (269.875)	12.25 (311.15)
B	1.016 (25.400)	1.016 (25.400)	1.016 (25.400)	1.016 (25.400)	1.016 (25.400)	1.266 (31.750)
C	1.625 (50.800)	2.000 (58.750)	2.313 (41.275)	1.625 (41.275)	1.625 (50.800)	2.000 (58.750)
D	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)	2.125 (53.975)
E	.875 (22.225)	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	1.125 (28.575)	1.500 (38.100)
F	1.000 (25.400)	1.000 (25.400)	1.000 (25.400)	1.250 (31.750)	1.250 (31.750)	1.250 (31.750)
G	1.125 (28.575)	1.125 (28.575)	1.125 (28.575)	1.250 (31.750)	1.250 (31.750)	1.375 (34.925)
H	2.500 (63.500)	2.625 (66.675)	2.625 (66.675)	2.750 (69.850)	2.875 (73.025)	3.500 (88.900)
I	2.875 (73.025)	3.250 (82.55)	3.750 (95.250)	4.250 (107.95)	5.000 (127.000)	6.000 (152.400)
J	1.125 (28.575)	1.125 (28.575)	1.125 (28.575)	1.250 (31.750)	1.250 (31.750)	1.250 (31.750)
K	2.625 (66.675)	2.625 (66.675)	2.625 (66.675)	2.750 (69.850)	2.750 (69.850)	2.750 (69.850)
L	1 1/16- 12	1 1/16- 12	1 1/4- 12	1 1/4- 12	1 1/4- 12	1 1/2- 12
M	.375 (9.525)	.375 (9.525)	.500 (12.700)	.563 (14.300)	.625 (15.875)	.750 (19.050)

All dimensions in inches (mm). All dimensions are nominal and are for standard configurations.

HYDRO-LINE® Actuation Products



N5 SERIES CYLINDERS

- NFPA interchangeable
- N5–3000 psi nominal hydraulic
- AN5 – to 250 psi very heavy-duty pneumatic
- LAN5 – to 250 psi very heavy-duty pneumatic – permanently lubricated
- All steel construction



R5 SERIES CYLINDERS

- NFPA interchangeable
- A5/R5 – to 250 psi pneumatic
- LA5/LR5 – to 250 psi pneumatic – permanently lubricated
- HA5 – to 400 psi hydraulic
- HR5 – 1500 psi nominal hydraulic



HM SERIES CYLINDERS

- Conform to international metric specifications ISO 6020/2 and DIN 24 554
- 25 mm to 200 mm bore sizes
- 210 BAR nominal hydraulic
- All steel construction



ROCKFORD SERIES CYLINDERS

- ASAE interchangeable agricultural cylinders
- Rockford 2500–2500 psi hydraulic
- Rockford 3000–3000 psi hydraulic



SERIES 20/30 BOOSTERS

- Standard series to 5000 psi output
- Custom designs to 20,000 psi

T SERIES AIR/OIL TANKS

All steel construction

Q6T SERIES AIR/OIL TANKS

Aluminum end caps and translucent tubing



ELECTRONIC FEEDBACK CYLINDERS

Hydraulic or pneumatic cylinders which incorporate cylinder position sensing and feedback throughout the stroke. Available in N5, R5, A5, Q6, HM, HW, SM or special cylinders.



HW SERIES CYLINDERS

- Welded construction
- Heavy duty industrial grade
- 3000 psi nominal hydraulic



TSAYER™ CYLINDERS

- Threaded body construction
- To 250 psi pneumatic
- To 1000 psi nominal hydraulic



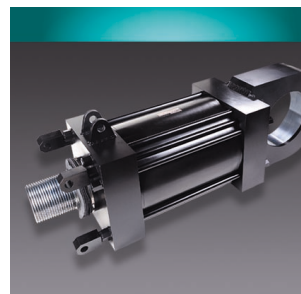
SM SERIES CYLINDERS

- Steel mill type construction
- MSM–2000 psi nominal hydraulic
- HSM–3000 psi nominal hydraulic
- ASM–Pneumatic



Q6 SERIES CYLINDERS

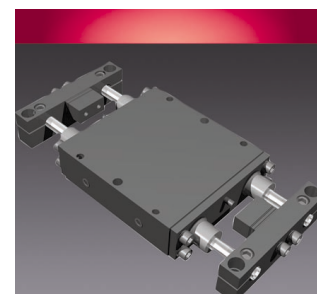
- NFPA Interchangeable
- Q6–250 psi pneumatic - permanently lubricated
- HQ6–400 psi hydraulic
- 3/4" to 8" Bores



CUSTOM CYLINDERS

Custom cylinders to meet special requirements

- Bores to 48"
- Strokes to 300"
- Pressures to 10,000 psi or higher



HL SLIDES

- Transfer and lift systems
- Available in 2, 4 and multi positions
- Payloads up to 5000 lbs.
- Travel up to 36"

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