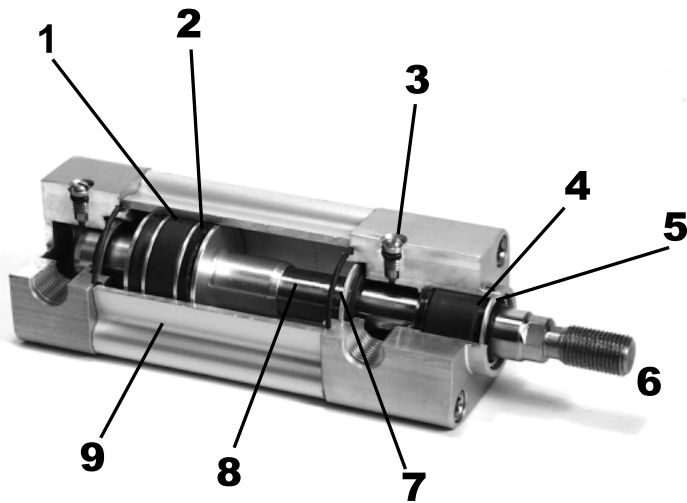


Taskmaster® Pneumatic Cylinder

Design Features, 1-1/2" - 4" Bores

Rexroth
Bosch Group

Technical Data, 1-1/2" - 4" bore sizes



TaskMaster Design Features, 1-1/2" - 4"

Design Features (refer to call-outs above)

1. Magnetic piston standard; Extra-wide, non-metallic wear strip provides extended service life even under harsh side loads.
2. Teflon coated U-cup piston seal provides long life under a variety of conditions.
3. Adjustable pneumatic cushioning optional.
4. Long life, corrosion resistant graphite bearing. Rod cartridge can be installed without cylinder disassembly.
5. Double lip rod seal/wiper combination is pressure loaded to ensure a positive seal for various applications.
6. Strong, fatigue-resistant rod threads. KK1 or KK2 threads available.
7. Self aligning cushion seals act as floating check valves, improving cylinder cycle times.
8. High strength steel piston rod. Hard chromium plated for maximum durability. Stainless steel rod available.
9. Rugged, non-corroding aluminum tubing is hard anodized for longer cylinder life. Smooth profile means there is no place for dirt to collect!

Standard Features include:

Pressure rating: 200 psi air

Temperature range: 0° F to 160° F ambient (-15 to 400° F Viton), low temperature to -40° available.

Three integral mounts (head, cap and MS4), plus ten additional NFPA mountings available.

Piston Rod: Case hardened to 50-55 Rockwell "C" chrome-plated and finished to 15 micro-inches or better (5/8" not case hardened).

Tube: Hard anodized alloy aluminum for light weight, high strength, & maximum corrosion resistance.

Pre-Lubricated Design: Teflon-coated piston and polyurethane rod seals plus factory pre-lubrication eliminates the need for air line lubrication.

New Features for Taskmaster cylinders:

Two versions available: TM-1 series is NFPA compliant including rod threads and ports, TM-8 series replaces the original Taskmaster design.

Magnetic piston standard in all cylinders for sensor applications.

Oversize rods available as a standard option.

Stop tubes are available for long stroke, heavy side load applications.

Viton® seals available for all seals except piston.

Ports and cushions can be placed in any quadrant for maximum design flexibility.

Smooth head and cap design eliminates gathering of foreign material.

Ports: NPTF dryseal tapered threads, oversize ports available.

Rod End Threads: KK1 male, KK2 male, KK1 female or KK1 studded male threads.

Taskmaster® Pneumatic Cylinder

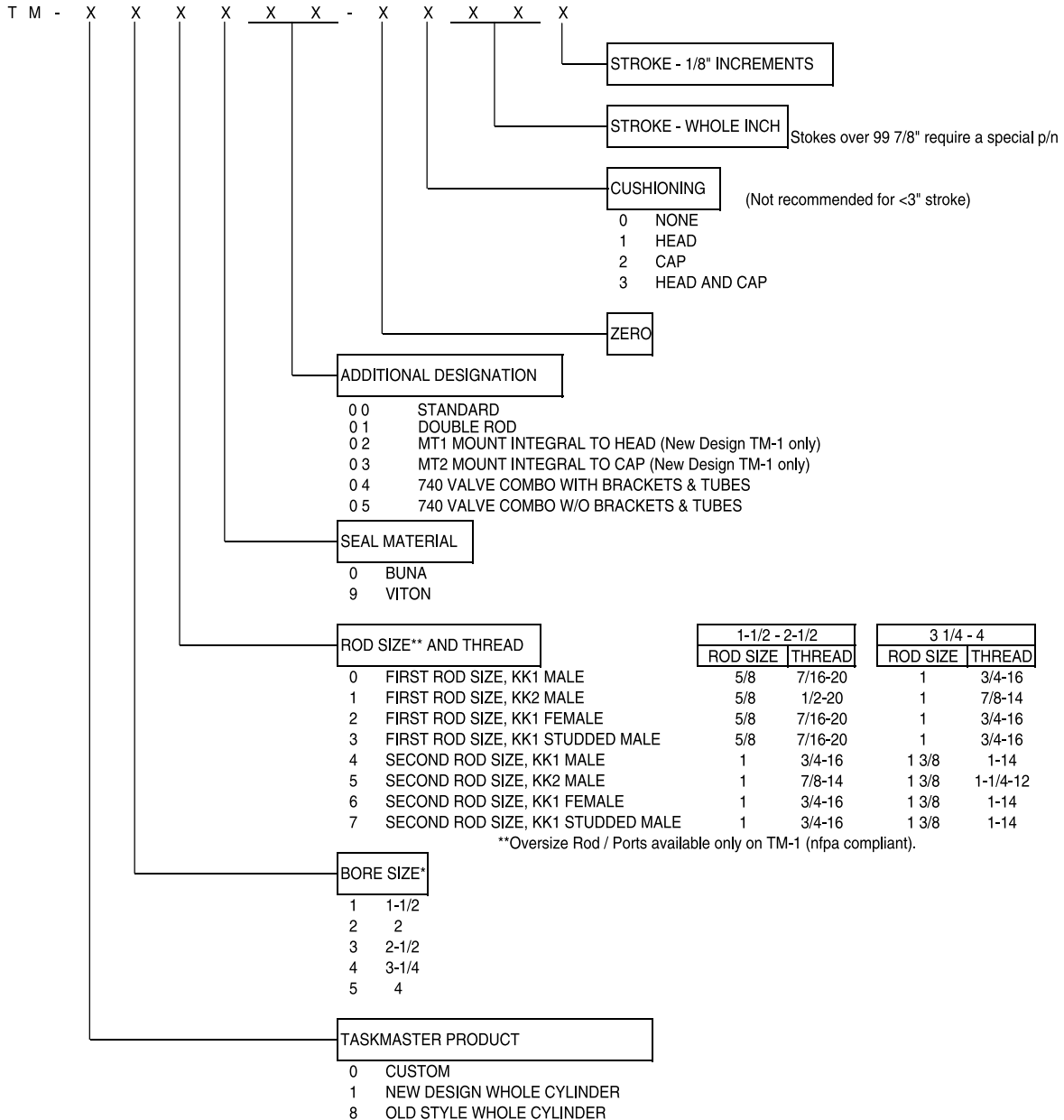
Design Features, 1-1/2" - 4" Bores



How to Order Code - Taskmaster Cylinders up to 4" Bore

TASKMASTER Cylinder Product Numbering Code

06/02



Old custom cylinders converted to new format will be the old part number with the "P" replaced by "TM"

Example: P - 0 2 6 4 6 5 - 0 0 0 0 0 will become
T M - 0 2 6 4 6 5 - 0 0 0 0 0

Custom cylinders begin with T M - 0 3 1 0 0 0 - X X X X X and proceed sequentially from there.
X X X X X is standard suffix format

Custom cylinders are assigned by factory only!

Part number example:

T M - 1 2 0 9 0 0 - 0 3 1 2 5 New design cylinder, 2" bore, first rod size, viton seals, cushions both ends, 12-5/8" stroke

Taskmaster® Pneumatic Cylinder

Design Features, 1-1/2" - 4" Bores

Rexroth
Bosch Group

Common MS4 (Basic) Cylinder Part Numbers

Common cylinder part numbers with integral MS4 mount are listed here. For other cylinders, see How to Order section.

The basic TASKMASTER Cylinder is furnished with 3 possible means of mounting: side tapped (MS-4) cap flush, head male rabbet.

Twelve popular mounting kits can be assembled to the basic cylinder and are shown on the following pages.

Mounting kits should be ordered separately from the cylinder.

Mounting kit part numbers and accessory part numbers follow.

For part numbers listed here, rod threads are KK2 male for the TM-8 series. For TM-1 series listed, rod threads are KK1 male. See "How to Order" section for complete breakdown.



1.5" BORE

PART NUMBER (original replacement) Rod thread KK2=1/2-20 Port size EE=1/4" NPTF	PART NUMBER (NFPA Compliant) Rod thread KK1=7/16-20 Port size EE=3/8" NPTF	DESCRIPTION
TM-811000-00010	TM-110000-00010	1.5 x 1 (non-cushioned)
TM-811000-00020	TM-110000-00020	1.5 x 2 (non-cushioned)
TM-811000-00030	TM-110000-00030	1.5 x 3 (non-cushioned)
TM-811000-03040	TM-110000-03040	1.5 X 4 (cushioned)
TM-811000-03050	TM-110000-03050	1.5 x 5 (cushioned)
TM-811000-03060	TM-110000-03060	1.5 x 6 (cushioned)
TM-811000-03070	TM-110000-03070	1.5 x 7 (cushioned)
TM-811000-03080	TM-110000-03080	1.5 x 8 (cushioned)
TM-811000-03090	TM-110000-03090	1.5 x 9 (cushioned)
TM-811000-03100	TM-110000-03100	1.5 x 10 (cushioned)
TM-811000-03120	TM-110000-03120	1.5 x 12 (cushioned)

2" BORE

PART NUMBER (original replacement) Rod thread KK2=1/2-20 Port size EE=1/4" NPTF	PART NUMBER (NFPA Compliant) Rod thread KK1=7/16-20 Port size EE=3/8" NPTF	DESCRIPTION
TM-821000-00010	TM-120000-00010	2 X 1 (non-cushioned)
TM-821000-00020	TM-120000-00020	2 X 2 (non-cushioned)
TM-821000-00030	TM-120000-00030	2 X 3 (non-cushioned)
TM-821000-03040	TM-120000-03040	2 X 4 (cushioned)
TM-821000-03050	TM-120000-03050	2 X 5 (cushioned)
TM-821000-03060	TM-120000-03060	2 X 6 (cushioned)
TM-821000-03070	TM-120000-03070	2 X 7 (cushioned)
TM-821000-03080	TM-120000-03080	2 X 8 (cushioned)
TM-821000-03090	TM-120000-03090	2 X 9 (cushioned)
TM-821000-03100	TM-120000-03100	2 X 10 (cushioned)
TM-821000-03120	TM-120000-03120	2 X 12 (cushioned)

Taskmaster® Pneumatic Cylinder

Design Features, 1-1/2" - 4" Bores

Rexroth
Bosch Group

2.5" BORE

PART NUMBER (original replacement) Rod thread KK2=1/2-20 Port size EE=1/4" NPTF	PART NUMBER (NFPA Compliant) Rod thread KK1=7/16-20 Port size EE=3/8" NPTF	DESCRIPTION
TM-831000-00010	TM-130000-00010	2.5 X 1 (non-cushioned)
TM-831000-00020	TM-130000-00020	2.5 X 2 (non-cushioned)
TM-831000-00030	TM-130000-00030	2.5 X 3 (non-cushioned)
TM-831000-03040	TM-130000-03040	2.5 X 4 (cushioned)
TM-831000-03050	TM-130000-03050	2.5 X 5 (cushioned)
TM-831000-03060	TM-130000-03060	2.5 X 6 (cushioned)
TM-831000-03070	TM-130000-03070	2.5 X 7 (cushioned)
TM-831000-03080	TM-130000-03080	2.5 X 8 (cushioned)
TM-831000-03090	TM-130000-03090	2.5 X 9 (cushioned)
TM-831000-03100	TM-130000-03100	2.5 X 10 (cushioned)
TM-831000-03120	TM-130000-03120	2.5 X 12 (cushioned)

3.25" BORE

PART NUMBER (original replacement) Rod thread KK2=7/8-14 Port size EE=3/8" NPTF	PART NUMBER (NFPA Compliant) Rod thread KK1=3/4-16 Port size EE=1/2" NPTF	DESCRIPTION
TM-841000-00010	TM-140000-00010	3.25 X 1 (non-cushioned)
TM-841000-00020	TM-140000-00020	3.25 X 2 (non-cushioned)
TM-841000-00030	TM-140000-00030	3.25 X 3 (non-cushioned)
TM-841000-03040	TM-140000-03040	3.25 X 4 (cushioned)
TM-841000-03050	TM-140000-03050	3.25 X 5 (cushioned)
TM-841000-03060	TM-140000-03060	3.25 X 6 (cushioned)
TM-841000-03070	TM-140000-03070	3.25 X 7 (cushioned)
TM-841000-03080	TM-140000-03080	3.25 X 8 (cushioned)
TM-841000-03090	TM-140000-03090	3.25 X 9 (cushioned)
TM-841000-03100	TM-140000-03100	3.25 X 10 (cushioned)
TM-841000-03120	TM-140000-03120	3.25 X 12 (cushioned)

4" BORE

PART NUMBER (original replacement) Rod thread KK2=7/8-14 Port size EE=3/8" NPTF	PART NUMBER (NFPA Compliant) Rod thread KK1=3/4-16 Port size EE=1/2" NPTF	DESCRIPTION
TM-851000-00010	TM-150000-00010	4 X 1 (non-cushioned)
TM-851000-00020	TM-150000-00020	4 X 2 (non-cushioned)
TM-851000-00030	TM-150000-00030	4 X 3 (non-cushioned)
TM-851000-03040	TM-150000-03040	4 X 4 (cushioned)
TM-851000-03050	TM-150000-03050	4 X 5 (cushioned)
TM-851000-03060	TM-150000-03060	4 X 6 (cushioned)
TM-851000-03070	TM-150000-03070	4 X 7 (cushioned)
TM-851000-03080	TM-150000-03080	4 X 8 (cushioned)
TM-851000-03090	TM-150000-03090	4 X 9 (cushioned)
TM-851000-03100	TM-150000-03100	4 X 10 (cushioned)
TM-851000-03120	TM-150000-03120	4 X 12 (cushioned)

MODEL NUMBER CONVERSION

Bore					Current Versions	
	1960's	1970's	1980's-90s'	TM-8 Series	TM-1 Series	
1 1/2"	P -057270-	P -060162-	P -068174-	TM-811000-	TM-110000-	
2"	P -057196-	P -060170-	P -068177-	TM-821000-	TM-120000-	
2 1/2"	P -057284-	P -060179-	P -068180-	TM-831000-	TM-130000-	
3 1/4"	P -057297-	P -060188-	P -068183-	TM-841000-	TM-140000-	
4"	P -057527-	P -060197-	P -068186-	TM-851000-	TM-150000-	

Taskmaster® Pneumatic Cylinder

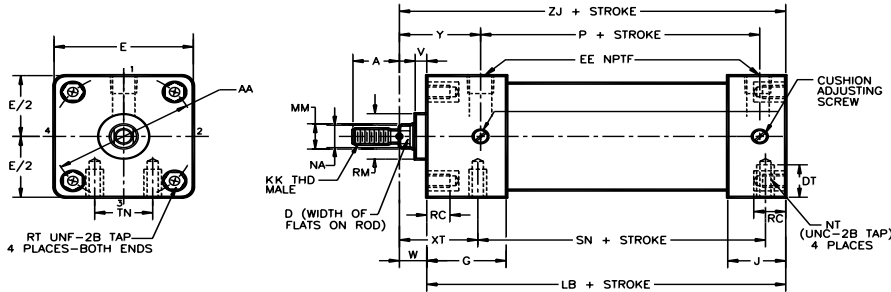
MS4 Basic Cylinder Specifications



MS4 [BASIC CYLINDER]

Side Tapped Mounting

MS4



BASIC CYLINDER - MODULAR DESIGN. Refer to these tables for dimensions not shown on other mounts, or for those affected by rod size. All dimensions are in inches unless otherwise indicated.

TaskMaster basic cylinder is furnished with 3 possible mounts: MS4 side-tapped mount, cap flush, or head male rabbet.

Twelve popular mounting kits can be assembled to the basic cylinder and are detailed in the following sections.

Mounting kits should be ordered separately from the cylinder; for basic cylinder part numbers, see "How to Order" section or Common Cylinder Part Numbers section.

MS4 Table 1. Dimensions affected by rod diameter. (Dimensions in inches)

BORE SIZE	MM ROD	W [TM-8]	W [TM-1]	EE [TM-8]	EE [TM-1]	RM	DT (cap)	DT (head)	ZJ [TM-8]	ZJ [TM-1]	A [TM-8]	A [TM-1]	D	NA
1.50	0.625	0.59	0.62	1/4	3/8	1.12	0.38	0.38	4.63	4.66	1.00	0.75	0.50	0.56
1.50	1.000	-	1.00	-	3/8	1.50	0.38	0.25	-	5.04	-	1.12	0.88	0.94
2.00	0.625	0.59	0.62	1/4	3/8	1.12	0.50	0.50	4.63	4.66	1.00	0.75	0.50	0.56
2.00	1.000	-	1.00	-	3/8	1.50	0.50	0.38	-	5.04	-	1.12	0.88	0.94
2.50	0.625	0.59	0.62	1/4	3/8	1.12	0.69	0.69	4.75	4.78	1.00	0.75	0.50	0.56
2.50	1.000	-	1.00	-	3/8	1.50	0.69	0.50	-	5.16	-	1.12	0.88	0.94
3.25	1.000	0.75	0.75	3/8	1/2	1.50	0.75	0.75	5.63	5.63	1.50	1.12	0.88	0.94
3.25	1.375	-	1.00	-	1/2	2.38	0.75	0.75	-	5.88	-	1.63	1.12	1.31
4.00	1.000	0.75	0.75	3/8	1/2	1.50	0.75	0.75	5.63	5.63	1.50	1.12	0.88	0.94
4.00	1.375	-	1.00	-	1/2	2.38	0.75	0.75	-	5.88	-	1.63	1.12	1.31

Oversize rods and ports are not available for TM-8 series.

MS4 Table 1. (cont.) Dimensions affected by rod diameter.

BORE SIZE	MM ROD	Y [TM-8]	Y [TM-1]	XT [TM-8]	XT [TM-1]
1.50	0.625	1.75	1.79	1.94	1.98
1.50	1.000	-	2.16	-	2.35
2.00	0.625	1.75	1.79	1.94	1.98
2.00	1.000	-	2.16	-	2.35
2.50	0.625	1.75	1.79	1.94	1.98
2.50	1.000	-	2.16	-	2.35
3.25	1.000	2.34	2.39	2.44	2.45
3.25	1.375	-	2.64	-	2.70
4.00	1.000	2.34	2.39	2.44	2.45
4.00	1.375	-	2.64	-	2.70

MS4 Table 2. Dimensions not affected by rod diameter.

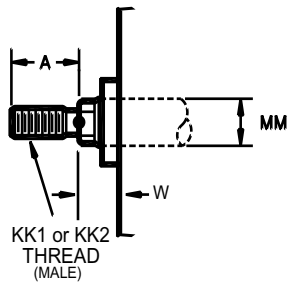
BORE SIZE	E	G	J	P	V	AA	LB	NT	RC	RT	SN	TN
1.50	2.00	1.72	1.12	2.31	0.25	2.02	4.03	1/4-20	0.47	1/4-28	2.25	0.62
2.00	2.50	1.72	1.12	2.31	0.25	2.60	4.03	5/16-18	0.50	5/16-24	2.25	0.88
2.50	3.00	1.72	1.25	2.44	0.25	3.10	4.16	3/8-16	0.50	5/16-24	2.38	1.25
3.25	3.75	2.25	1.12	2.75	0.25	3.90	4.88	1/2-13	0.53	3/8-24	2.62	1.50
4.00	4.50	2.25	1.12	2.69	0.25	4.70	4.88	1/2-13	0.53	3/8-24	2.62	2.06

*For 1.375" rod, P = 2.84.

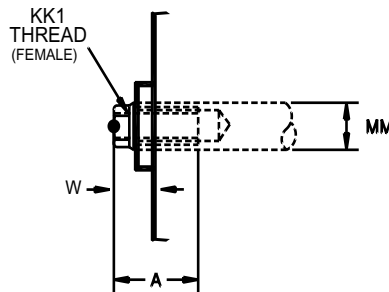
Rod Size/Thread Options

TASKMASTER ROD THREAD OPTIONS

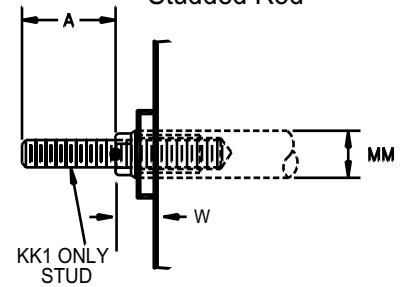
Male Rod



Female Rod



Studded Rod



Bore size	Rod thread options					TM-8		TM-1	
	MM Rod	Male KK2	Female KK1	Male KK1	Stud KK1	A	W	A	W
1-1/2, 2, 2-1/2"	0.625	1/2-20	7/16-20	7/16-20	7/16-20	1.00	0.59	0.75	0.62
1-1/2, 2, 2-1/2"	1.000	7/8-14	3/4-16	3/4-16	3/4-16	–	–	1.12	1.00
3-1/4, 4"	1.000	7/8-14	3/4-16	3/4-16	3/4-16	1.50	0.75	1.12	0.75
3-1/4, 4"	1.380	1-1/4-12	1-14	1-14	1-14	–	–	1.63	1.00

Male threads available in KK1 and KK2 thread sizes.

Female threads available in KK1 thread only. KK1 studded male rod end available.

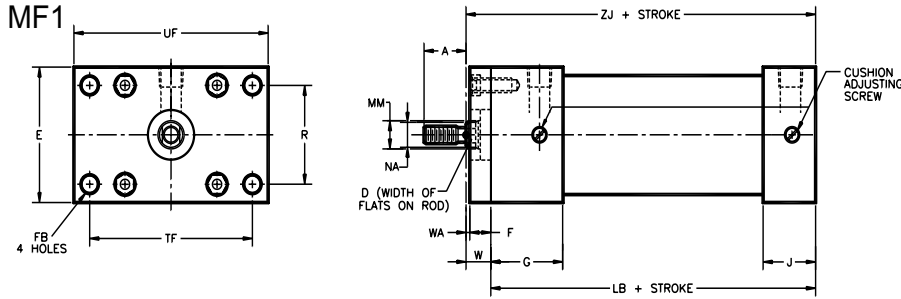
Note: Oversize rods were not available on earlier models, therefore not available on TM-8 series.

Taskmaster® Pneumatic Cylinder

MF1 Flange Mounting Kits - 1.5" thru 4" bore

Rexroth
Bosch Group

MF1 Flange Mounting Kit (Aluminum)

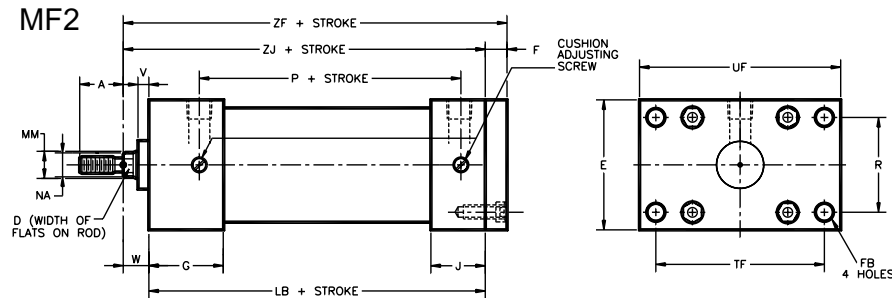


Part Number	MF1												
KIT PART NUMBER	BORE SIZE	MM ROD	E	F	R	W*	FB	LB	TF	UF	WA*	ZJ*	WEIGHT
P -057339-K0002	1.500	0.625	2.00	0.38	1.43	0.59	0.34	4.03	2.75	3.38	0.22	4.63	0 lb. 4 oz.
P -057238-K0002	2.000	0.625	2.50	0.50	1.84	0.59	0.41	4.03	3.38	4.13	0.09	4.63	0 lb. 8 oz.
P -057347-K0002	2.500	0.625	3.00	0.50	2.19	0.59	0.41	4.16	3.88	4.63	0.09	4.75	0 lb. 12 oz.
P -057351-K0002	3.250	1.000	3.75	0.63	2.76	0.75	0.47	4.88	4.69	5.50	0.13	5.63	1 lb. 4 oz.
P -057360-K0002	4.000	1.000	4.50	0.63	3.32	0.75	0.47	4.88	5.44	6.25	0.13	5.63	1 lb. 12 oz.

Mounting kit only, order cylinder separately. These kits fit first and second rod sizes. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

MF2 Flange Mounting Kit (Aluminum)



Model	MF2												
KIT PART NUMBER	BORE SIZE	MM ROD	E	F	R	W*	FB	LB	TF	UF	ZF*	ZJ*	WEIGHT
P -057339-K0002	1.500	0.625	2.00	0.38	1.43	0.59	0.34	4.03	2.75	3.38	5.00	4.63	0 lb. 4 oz.
P -057238-K0002	2.000	0.625	2.50	0.50	1.84	0.59	0.41	4.03	3.38	4.13	5.13	4.63	0 lb. 8 oz.
P -057347-K0002	2.500	0.625	3.00	0.50	2.19	0.59	0.41	4.16	3.88	4.63	5.25	4.75	0 lb. 12 oz.
P -057351-K0002	3.250	1.000	3.75	0.63	1.76	0.75	0.47	4.88	4.69	5.50	6.25	5.63	1 lb. 4 oz.
P -057360-K0002	4.000	1.000	4.50	0.63	3.32	0.75	0.47	4.88	5.44	6.25	6.25	5.63	1 lb. 12 oz.

Mounting kit only, order cylinder separately. These kits fit first and second rod sizes. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

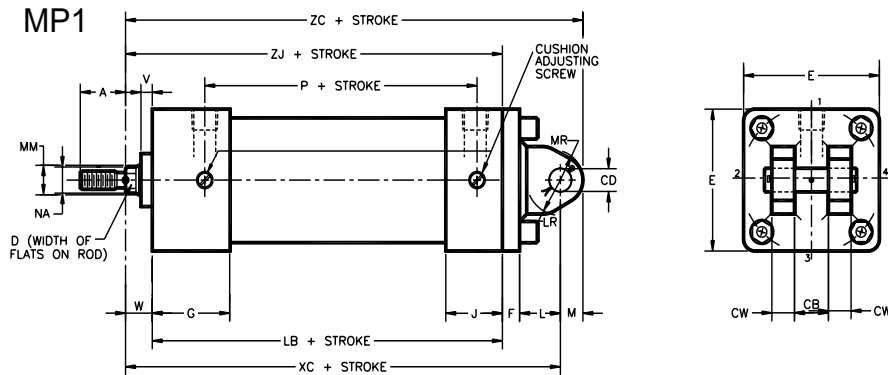
*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

Taskmaster® Pneumatic Cylinder

MP1 Clevis Mounting Kits - 1.5" thru 4" bore



MP1 Clevis Mounting Kit (Cast Iron), includes pivot pin

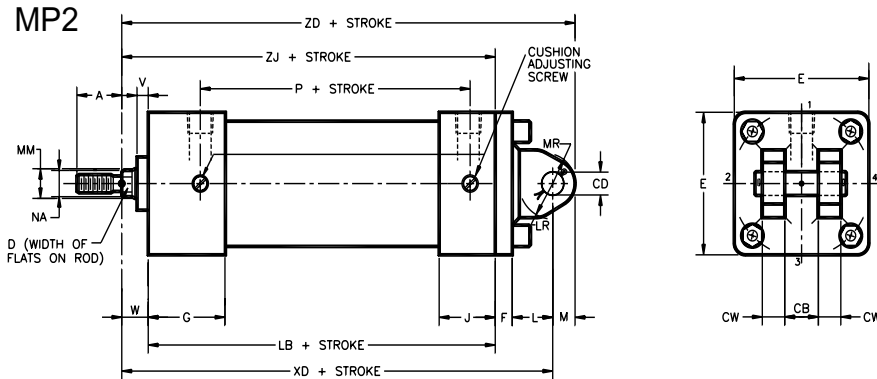


Model	MP1															
KIT PART NUMBER	BORE SIZE	MM ROD	E	F	L	W*	CB	CD	CW	LB	LR	MR	XC*	ZC*	ZJ*	WEIGHT
P -069624-K0001	1.500	0.625	2.00	0.38	0.38	0.59	0.75	0.500	0.50	4.03	0.75	0.63	5.38	5.88	4.63	0 lb. 6 oz.
P -069625-K0001	2.000	0.625	2.50	0.38	0.38	0.59	0.75	0.500	0.50	4.03	0.75	0.63	5.38	5.88	4.63	1 lb. 0 oz.
P -069626-K0001	2.500	0.625	3.00	0.38	0.38	0.59	0.75	0.500	0.50	4.16	0.75	0.63	5.50	6.00	4.75	1 lb. 4 oz.
P -069627-K0001	3.250	1.000	3.75	0.63	0.63	0.75	1.25	0.750	0.63	4.88	1.25	0.88	6.88	7.63	5.63	2 lb. 8 oz.
P -069628-K0001	4.000	1.000	4.50	0.63	0.63	0.75	1.25	0.750	0.63	4.88	1.25	0.88	6.88	7.63	5.63	3 lb. 8 oz.

Mounting kit only, order cylinder separately. These kits are not affected by rod size. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

MP2 Clevis Mounting Kit (Aluminum and Steel), includes pivot pin



Model	MP2																
BORE SIZE/ (Kit Material)	KIT PART NUMBER	WEIGHT	MM ROD	E	F	L	M	W*	CB	CD	CW	LB	LR	MR	XD*	ZD*	ZJ*
1.5 (Alum.)	P -057337-K0001	0 lb. 8 oz.	0.625	2.00	0.38	0.75	0.50	0.59	0.75	0.500	0.50	4.03	0.63	0.53	5.75	6.25	4.63
1.5 (Steel)	P -026003-K0051	0 lb. 14 oz.	0.625	2.00	0.38	0.75	0.50	0.59	0.75	0.500	0.50	4.03	0.59	0.69	5.75	6.25	4.63
2.0 (Alum.)	P -057234-K0001	0 lb. 8 oz.	0.625	2.50	0.38	0.75	0.50	0.59	0.75	0.500	0.50	4.03	0.63	0.53	5.75	6.25	4.63
2.0 (Steel)	P -026003-K0011	1 lb. 4 oz.	0.625	2.50	0.38	0.75	0.50	0.59	0.75	0.500	0.50	4.03	0.59	0.69	5.75	6.25	4.63
2.5 (Alum.)	P -057343-K0001	0 lb. 12 oz.	0.625	3.00	0.38	0.75	0.50	0.59	0.75	0.500	0.50	4.16	0.63	0.53	5.88	6.38	4.75
2.5 (Steel)	P -026003-K0021	1 lb. 8 oz.	0.625	3.00	0.38	0.75	0.50	0.59	0.75	0.500	0.50	4.16	0.59	0.69	5.88	6.38	4.75
3.25 (Alum.)	P -057357-K0001	1 lb. 12 oz.	1.000	3.75	0.63	1.25	0.75	0.75	1.25	0.750	0.63	4.88	0.88	0.78	7.50	8.25	5.63
3.25 (Steel)	P -026003-K0031	3 lb. 12 oz.	1.000	3.75	0.63	1.25	0.75	0.75	1.25	0.750	0.63	4.88	0.88	1.00	7.50	8.25	5.63
4.0 (Alum.)	P -057366-K0001	2 lb. 4 oz.	1.000	4.50	0.63	1.25	0.75	0.75	1.25	0.750	0.63	4.88	0.88	0.78	7.50	8.25	5.63
4.0 (Steel)	P -026003-K0041	4 lb. 12 oz.	1.00	4.50	0.63	1.25	0.75	0.75	1.25	0.750	0.63	4.88	0.88	1.00	7.50	8.25	5.63

Mounting kit only, order cylinder separately. These kits are not affected by rod size. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

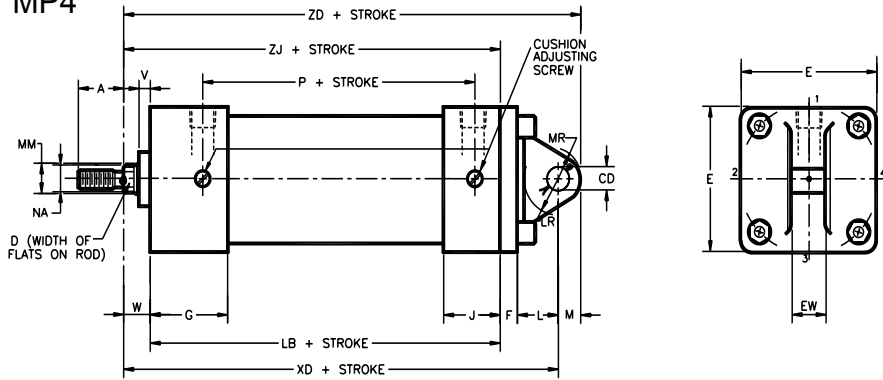
Taskmaster® Pneumatic Cylinder

MP4 Mounting Kits - 1.5" thru 4" bore

Rexroth
Bosch Group

MP4 Eye Bracket Mounting Kit (Aluminum)

MP4



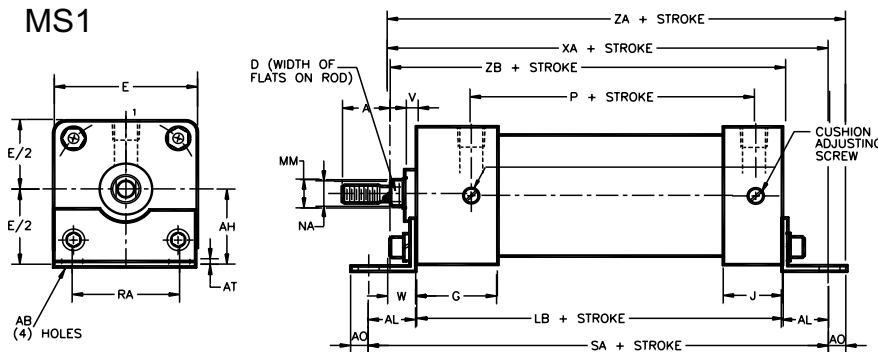
Model	MP4															
KIT PART NUMBER	BORE SIZE	MM ROD	E	F	L	M	W*	CD	EW	LB	LR	MR	XD*	ZD*	ZJ*	WEIGHT
P-057336-K0001	1.500	0.625	2.00	0.38	0.75	0.50	0.59	0.500	0.75	4.03	0.63	0.53	5.75	6.25	4.63	0 lb. 8 oz.
P-057246-K0001	2.000	0.625	2.50	0.38	0.75	0.50	0.59	0.500	0.75	4.03	0.63	0.53	5.75	6.25	4.63	0 lb. 8 oz.
P-057342-K0001	2.500	0.625	3.00	0.38	0.75	0.50	0.59	0.500	0.75	4.16	0.63	0.53	5.88	6.38	4.75	0 lb. 9 oz.
P-057355-K0001	3.250	1.000	3.75	0.63	1.25	0.75	0.75	0.750	1.25	4.88	0.88	0.78	7.50	8.25	5.63	1 lb. 7 oz.
P-057365-K0001	4.000	1.000	4.50	0.63	1.25	0.75	0.75	0.750	1.25	4.88	0.88	0.78	7.50	8.25	5.63	1 lb. 12 oz.

Mounting kit only, order cylinder separately. These kits are not affected by rod size. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

MS1 Mounting Kit

MS1



Model	MS1																
BORE SIZE	KIT PART NUMBER	WEIGHT	MM ROD	E	W*	AB	AH	AL	AO	AT	DD	LB	RA	SA	XA*	ZA*	ZB*
1.500	P-066664-K0002	0 lb. 6 oz.	0.625	2.00	0.59	0.44	1.19	1.00	0.37	0.12	1/4-28	4.03	1.25	6.03	5.63	6.00	4.63
2.000	P-066665-K0002	0 lb. 8 oz.	0.625	2.50	0.59	0.44	1.44	1.00	0.37	0.12	5/16-24	4.03	1.75	6.03	5.63	6.00	4.63
2.500	P-066666-K0002	0 lb. 9 oz.	0.625	3.00	0.59	0.44	1.62	1.00	0.37	0.12	5/16-24	4.16	2.25	6.16	5.75	6.13	4.75
3.250	P-066667-K0002	0 lb. 14 oz.	1.000	3.75	0.75	0.56	1.94	1.25	0.50	0.12	3/8-24	4.88	2.75	7.38	6.88	7.38	5.63
4.000	P-066668-K0002	1 lb. 0 oz.	1.000	4.50	0.75	0.56	2.25	1.25	0.50	0.12	3/8-24	4.88	3.50	7.38	6.88	7.38	5.63

Mounting kit only, order cylinder separately. These kits fit first and second rod sizes. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

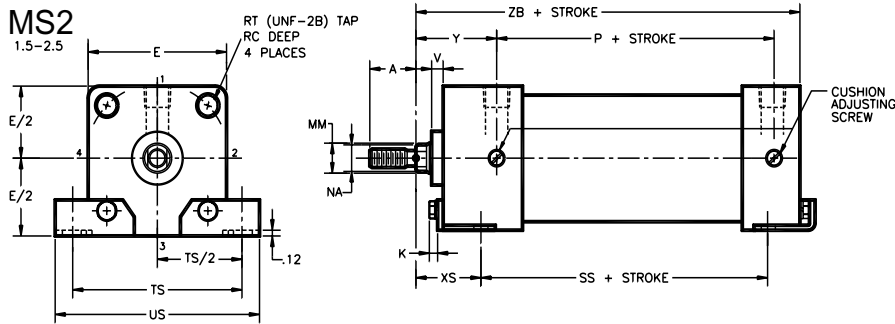
*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

Taskmaster® Pneumatic Cylinder

MS2 Mounting Kits - 1.5" thru 4" bore



MS2 Mounting Kit (Steel) 1 1/2" - 2 1/2" Bore

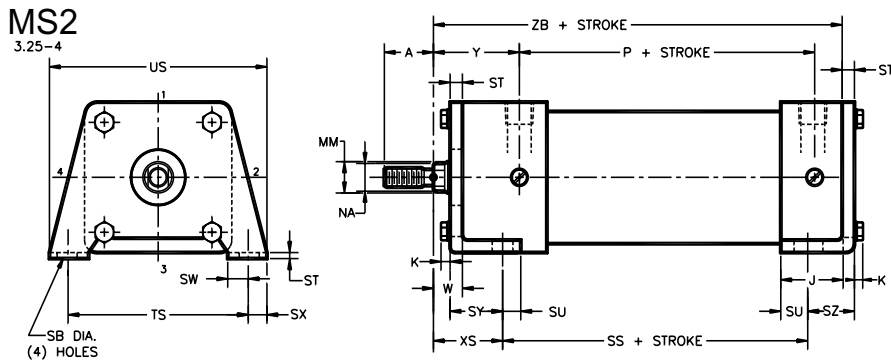


Model	MS2																	
KIT PART NUMBER	WEIGHT	BORE SIZE	MM ROD	C	F	K	W*	SB	SS	ST	SU	SW	SY	SZ	TS	US	XS*	ZB*
P-066498-K0002	0 lb. 6 oz.	1.500	0.625	0.75	2.00	0.23	0.59	0.44	2.88	0.12	0.48	0.88	0.90	0.50	2.75	3.43	1.38	4.62
P-066721-K0001	0 lb. 6 oz.	2.000	0.625	0.75	2.50	0.28	0.59	0.44	2.88	0.12	0.48	0.88	0.90	0.50	3.32	4.08	1.38	4.62
P-066721-K0001	0 lb. 6 oz.	2.500	0.625	0.75	3.00	0.28	0.59	0.44	3.00	0.12	0.48	0.88	0.90	0.50	3.67	4.43	1.38	4.75

Mounting kit only, order cylinder separately. These kits fit first and second rod sizes. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

MS2 Mounting Kit (Steel) 3 1/4" - 4" Bore



Model	MS2																	
KIT PART NUMBER	WEIGHT	BORE SIZE	MM ROD	E	K	W*	SB	SS	ST	SU	SW	SX	SY	SZ	TS	US	XS*	ZB*
P-066899-K0002	2 lb. 12 oz.	3.250	1.000	3.75	0.34	0.75	0.56	3.25	0.25	0.62	0.50	0.50	1.38	0.75	4.75	5.75	1.88	5.62
P-066900-K0002	4 lb. 4 oz.	4.000	1.000	4.50	0.34	0.75	0.56	3.25	0.31	0.62	0.50	0.50	1.44	0.81	5.50	6.50	1.88	5.62

Mounting kit only, order cylinder separately. These kits fit first and second rod sizes. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

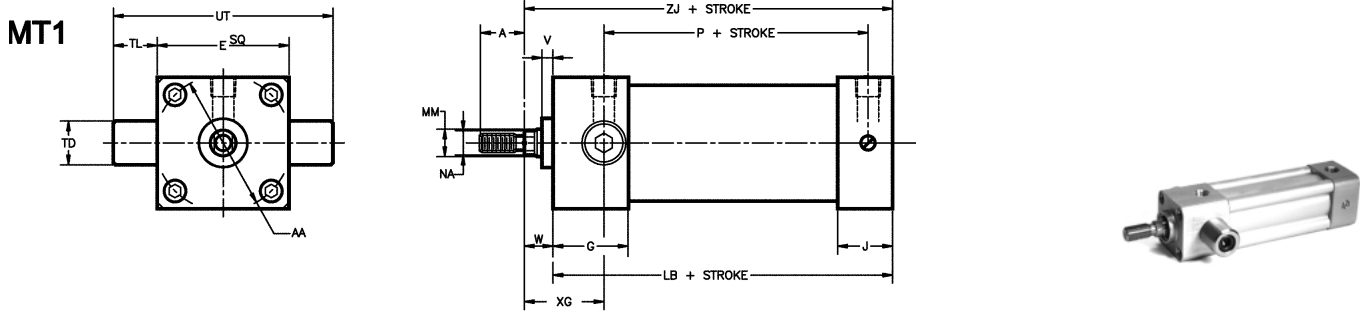
*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

Taskmaster® Pneumatic Cylinder

MT1 Mounts - 1.5" thru 4" bore



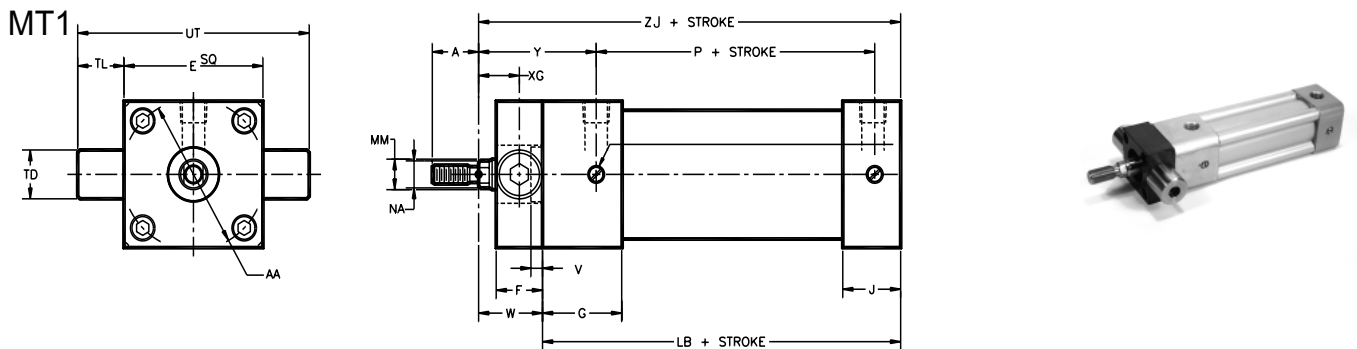
MT1 Front Trunnion¹ Mount - TM-1 Series [NFPA compliant] Complete Cylinder Dimensions



MT1 [TM-1 Series Complete Cylinder Dimensions]											
BORE SIZE	MM ROD	E	W	AA	LB	TD	TL	UT	XG	ZJ	WEIGHT
1.500	0.625	2.00	0.63	2.02	4.03	1.00	1.00	4.00	1.75	4.66	2 lb. 2 oz.
1.500	1.000	2.00	1.00	2.02	4.03	1.00	1.00	4.00	2.12	5.04	2 lb. 12 oz.
2.000	0.625	2.50	0.63	2.60	4.03	1.00	1.00	4.50	1.75	4.66	2 lb. 15 oz.
2.000	1.000	2.50	1.00	2.60	4.03	1.00	1.00	4.50	2.12	5.04	3 lb. 9 oz.
2.500	0.625	3.00	0.63	3.10	4.16	1.00	1.00	5.00	1.75	4.78	3 lb. 0 oz.
2.500	1.000	3.00	1.00	3.10	4.16	1.00	1.00	5.00	2.12	5.16	3 lb. 10 oz.
3.250	1.000	3.75	0.75	3.90	4.88	1.00	1.00	5.75	2.25	5.63	7 lb. 7 oz.
3.250	1.375	3.75	1.00	3.90	4.88	1.00	1.00	5.75	2.50	5.88	8 lb. 9 oz.
4.000	1.000	4.50	0.75	4.70	4.88	1.00	1.00	6.50	2.25	5.63	10 lb. 5 oz.
4.000	1.375	4.50	1.00	4.70	4.88	1.00	1.00	6.50	2.50	5.88	11 lb. 7 oz.

¹These are complete cylinders, not bolt-on kits.
Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

MT1 Front Trunnion² Mounting Kit - TM-8 Series Only (Aluminum block with steel trunnion pins)



Model	MT1 [TM-8 Series]												
KIT PART NUMBER	BORE SIZE	MM ROD	E	F	W	AA	LB	TD	TL	UT	XG	ZJ	WEIGHT
P-062495-K0001	1.500	0.625	2.00	1.00	1.38	2.02	4.03	1.00	1.00	4.00	0.88	5.41	0 lb. 12 oz.
P-062492-K0001	2.000	0.625	2.50	1.00	1.38	2.60	4.03	1.00	1.00	4.50	0.88	5.41	1 lb. 0 oz.
P-062498-K0001	2.500	0.625	3.00	1.00	1.38	3.10	4.16	1.00	1.00	5.00	0.88	5.53	1 lb. 4 oz.
P-062452-K0001	3.250	1.000	3.75	1.00	1.50	3.90	4.88	1.00	1.00	5.75	1.00	6.38	1 lb. 12 oz.
P-062501-K0001	4.000	1.000	4.50	1.00	1.50	4.70	4.88	1.00	1.00	6.50	1.00	6.38	2 lb. 8 oz.

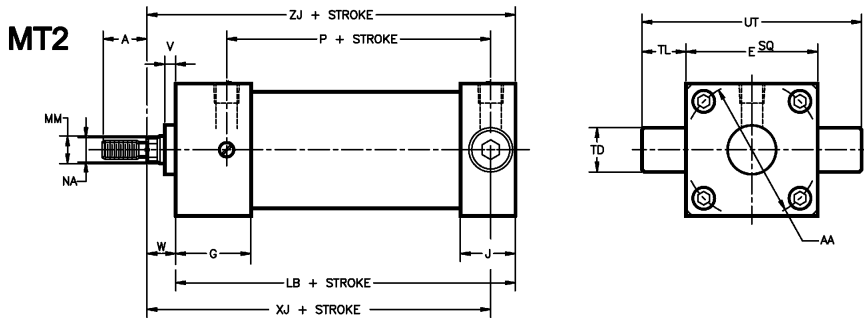
²These kits are for replacement only. For new cylinder, MT1 must be specified with cylinder due to rod extension being required.
Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

Taskmaster® Pneumatic Cylinder

MT2 Mounts - 1.5" thru 4" bore



MT2 Trunnion¹ Mount - TM-1 Series [NFPA compliant] Complete Cylinder Dimensions

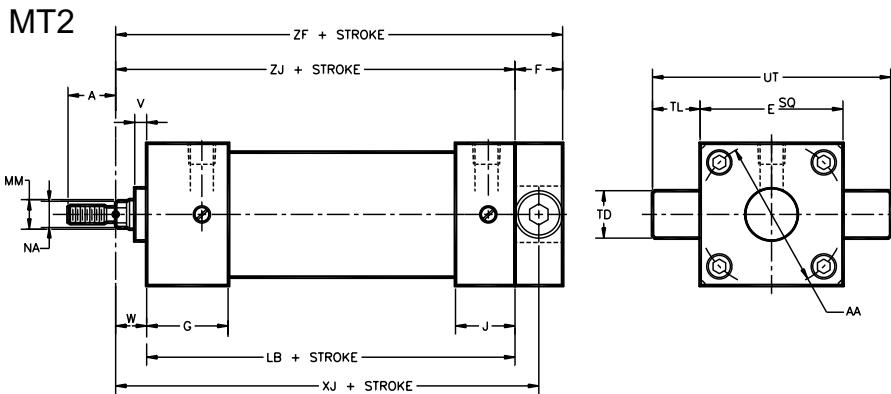


MT2 [TM-1 Series Complete Cylinder Dimensions]												
WEIGHT	BORE SIZE	MM ROD	E	W	AA	LB	TD	TL	UT	XJ	ZJ	
2 lb. 2 oz.	1.500	0.625	2.00	0.63	2.02	4.03	1.00	1.00	4.00	4.12	4.66	
2 lb. 12 oz.	1.500	1.000	2.00	1.00	2.02	4.03	1.00	1.00	4.00	4.50	5.04	
2 lb. 15 oz.	2.000	0.625	2.50	0.63	2.60	4.03	1.00	1.00	4.50	4.12	4.66	
3 lb. 9 oz.	2.000	1.000	2.50	1.00	2.60	4.03	1.00	1.00	4.50	4.50	5.04	
3 lb. 0 oz.	2.500	0.625	3.00	0.63	3.10	4.16	1.00	1.00	5.00	4.25	4.78	
3 lb. 10 oz.	2.500	1.000	3.00	1.00	3.10	4.16	1.00	1.00	5.00	4.61	5.16	
7 lb. 7 oz.	3.250	1.000	3.75	0.75	3.90	4.88	1.00	1.00	5.75	5.00	5.63	
8 lb. 9 oz.	3.250	1.375	3.75	1.00	3.90	4.88	1.00	1.00	5.75	5.25	5.88	
10 lb. 5 oz.	4.000	1.000	4.50	0.75	4.70	4.88	1.00	1.00	6.50	5.00	5.63	
11 lb. 7 oz.	4.000	1.375	4.50	1.00	4.70	4.88	1.00	1.00	6.50	5.25	5.88	

Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

¹These are complete cylinders, not bolt-on kits.

MT2 Trunnion Mounting Kit - TM-8 Series only (Aluminum block with steel trunnion pins)



Model	MT2 [TM-8 Series]														
WEIGHT	KIT PART NUMBER	BORE SIZE	MM ROD	E	F	W	AA	LB	TD	TL	UT	XJ	ZF	ZJ	
0 lb. 12 oz.	P-062495-K0001	1.500	0.625	2.00	1.00	0.59	2.02	4.03	1.00	1.00	4.00	5.13	5.63	4.63	
1 lb. 0 oz.	P-062492-K0001	2.000	0.625	2.50	1.00	0.59	2.60	4.03	1.00	1.00	4.50	5.13	5.63	4.63	
1 lb. 4 oz.	P-062498-K0001	2.500	0.625	3.00	1.00	0.59	3.10	4.16	1.00	1.00	5.00	5.25	5.75	4.75	
1 lb. 12 oz.	P-062452-K0001	3.250	1.000	3.75	1.00	0.75	3.90	4.88	1.00	1.00	5.75	6.13	6.63	5.63	
2 lb. 8 oz.	P-062501-K0001	4.000	1.000	4.50	1.00	0.75	4.70	4.88	1.00	1.00	6.50	6.13	6.63	5.63	

Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

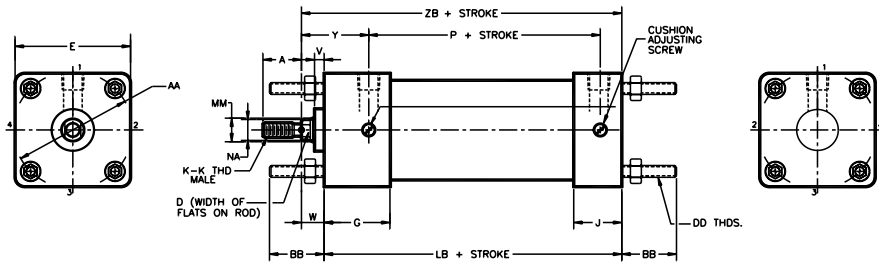
Taskmaster® Pneumatic Cylinder

MX1, 2, 3, 4 - Extended Tie Rod Mounting Kits

Rexroth
Bosch Group

MX1, 2, 3, 4 Kits (Extended Tie Rods) Mounting Kit

MX1, 2, 3, 4



NOTE:

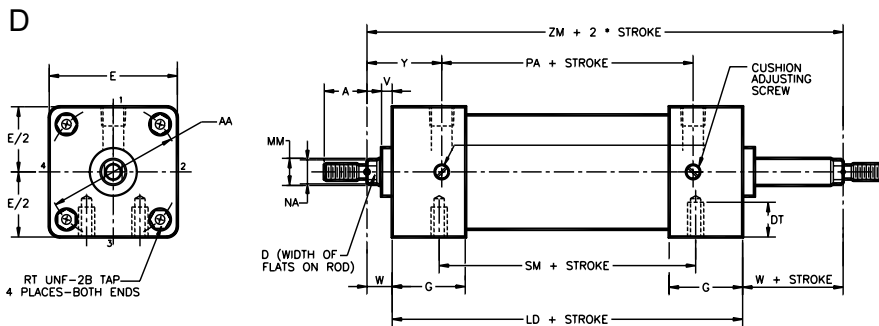
- MX1 - Tie rods extended both ends: Order (2) MX kits.
- MX2 - Tie rods extended cap end: Order (1) MX kit.
- MX3 - Tie rods extended head end: Order (1) MX kit.
- MX4 - Two tie rods extended both ends: Order (1) MX kit.

Model	MX1, 2, 3, 4													
KIT PART NUMBER	BORE SIZE	MM ROD	E	G	J	V	W*	AA	BB	DD	LB	RM	ZB*	WEIGHT
P -067028-K0001	1.500	0.625	2.00	1.72	1.13	0.25	0.59	2.02	1.31	1/4-28	4.03	1.13	4.62	0 lb. 2 oz.
P -067029-K0001	2.000	0.625	2.50	1.72	1.13	0.25	0.59	2.60	1.53	5/16-24	4.03	1.13	4.62	0 lb. 4 oz.
P -067029-K0001	2.500	0.625	3.00	1.72	1.25	0.25	0.59	3.10	1.53	5/16-24	4.16	1.13	4.75	0 lb. 4 oz.
P -067030-K0001	3.250	1.000	3.75	2.25	1.13	0.25	0.75	3.90	2.13	3/8-24	4.88	1.50	5.62	0 lb. 6 oz.
P -067030-K0001	4.000	1.000	4.50	2.25	1.13	0.25	0.75	4.70	2.13	3/8-24	4.88	1.50	5.62	0 lb. 6 oz.

Mounting kit only, order cylinder separately. These kits are not affected by rod size. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

D Double Rod



Model	D Double Rod															
BORE SIZE	MM ROD	E	G	V	W*	AA	DT	LD	NT	PA	RC	RT	SM	TN	XT	ZM*
1.500	0.625	2.00	1.72	0.25	0.59	2.02	0.38	4.63	1/4-20	2.31	0.47	1/4-28	1.94	0.63	1.94	5.81
2.000	0.625	2.50	1.72	0.25	0.59	2.60	0.50	4.63	5/16-18	2.31	0.50	5/16-24	1.94	0.88	1.94	5.81
2.500	0.625	3.00	1.72	0.25	0.59	3.10	0.69	4.63	3/8-16	2.31	0.50	5/16-24	1.94	1.25	1.94	5.81
3.250	1.000	3.75	2.25	0.25	0.75	3.90	0.75	6.00	1/2-13	2.81	0.53	3/8-24	2.62	1.50	2.44	7.50
4.000	1.000	4.50	2.25	0.25	0.75	4.70	0.75	5.00	1/2-13	2.81	0.53	3/8-24	2.62	2.06	2.44	7.50

Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

*Dimensions are for TM-8 series, for TM-1 series see MS4 basic cylinder drawing.

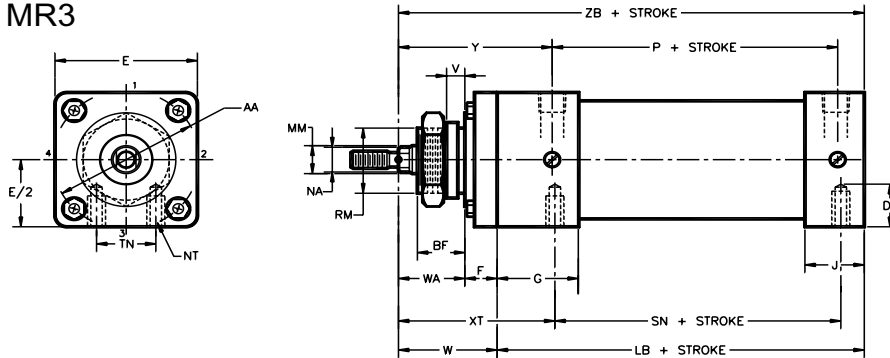
Taskmaster® Pneumatic Cylinder

MR3 - 1.5" thru 4" bore Nose Mounting Kit

Rexroth
Bosch Group

MR3 Nose Mounting Kit (TM-8 Series Only)

MR3



MR3 Nose Mount Kit*

BORE SIZE	MM ROD	STANDARD CYLINDER PREFIX (TM-8 Series)	KIT PART NO.*	WEIGHT
1.50	0.625	TM-068204-	P -062454-K0001	0 lb. 9 oz.
2.00	0.625	TM-068207-	P -062455-K0001	0 lb. 12 oz.
2.50	0.625	TM-068210-	P -062456-K0001	0 lb. 13 oz.
3.25	1.000	TM-068213-	P -062457-K0001	1 lb. 4 oz.
4.00	1.000	TM-068216-	P -062458-K0001	4 lb. 4 oz.

These kits are for replacement only. For complete cylinders, order by description, using prefixes for cylinders shown.

*TM-8 series only, not available for TM-1 series.

Dimensions

E	F	V	W	Y	AA	BF	LB	RM	WA	XT	ZB	BK - THD
2.00	0.56	0.25	1.78	2.94	2.02	0.88	4.03	1.061	1.22	3.13	5.81	1.00 - 14
2.50	0.68	0.25	1.78	30.6	2.60	0.88	4.03	1.061	1.22	3.25	5.94	1.00 - 14
3.00	0.68	0.31	2.03	3.19	3.10	1.00	4.16	1.374	1.34	3.38	6.19	1.38 - 12
3.75	0.93	0.31	2.43	4.03	3.90	1.00	4.88	1.499	1.50	4.13	7.31	1.50 - 12
4.50	0.93	0.38	2.56	4.22	4.70	1.13	4.88	1.749	1.63	4.25	7.44	1.75 - 12

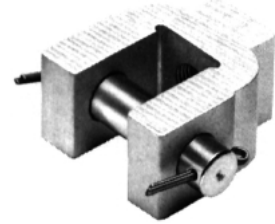
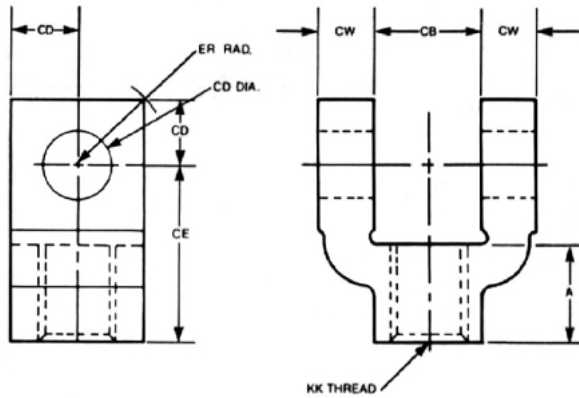
These dimensions are not affected by rod size. Dimensions in inches, for those not shown see MS4 basic cylinder drawing.

Taskmaster® Pneumatic Cylinder

Accessories - 1.5" thru 4" bore

Rexroth
Bosch Group

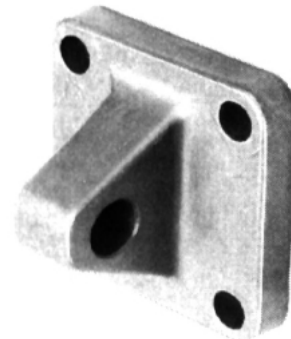
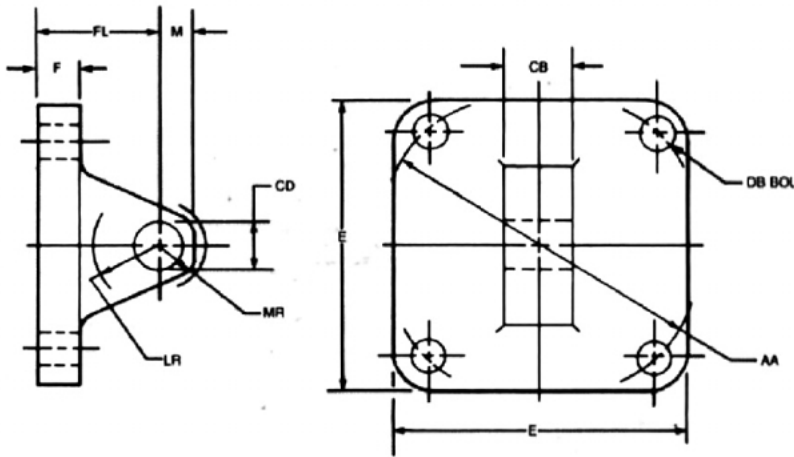
Female Rod Clevis (Aluminum)



PART NO.	BORE	ROD	THREAD KK	A	CB	CD	CE	CW	ER	WEIGHT
P-057236-K0000	1.5, 2 & 2.5	0.625	1/2-20	0.75	0.75	0.50	1.50	0.50	0.72	0 lb. 9 oz.
P-057350-K0000	3.25 & 4	1.000	7/8-14	1.13	1.25	0.75	2.06	0.63	1.06	1 lb. 0 oz.

Includes pivot pin and retaining rings. For sizes not shown, see NFPA cylinder accessories.

Eye Bracket (Aluminum)



PART NO.	WEIGHT	BORE	E	F	M	AA	CB	CD	DB	FL	LR	MR
P-057335-00000	0 lb. 4 oz.	1.50	2.00	0.38	0.50	2.02	0.75	0.50	0.25	1.13	0.63	0.53
P-057247-00000	0 lb. 4 oz.	2.00	2.50	0.38	0.50	2.60	0.75	0.50	0.31	1.13	0.63	0.53
P-057341-00000	0 lb. 8 oz.	2.50	3.00	0.38	0.50	3.10	0.75	0.50	0.31	1.13	0.63	0.53
P-028040-00000	1 lb. 4 oz.	3.25	3.75	0.63	0.75	3.90	1.25	0.75	0.38	1.88	0.88	0.78
P-028042-00000	1 lb. 8 oz.	4.00	4.50	0.63	0.75	4.70	1.25	0.75	0.38	1.88	0.88	0.78

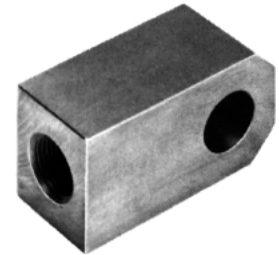
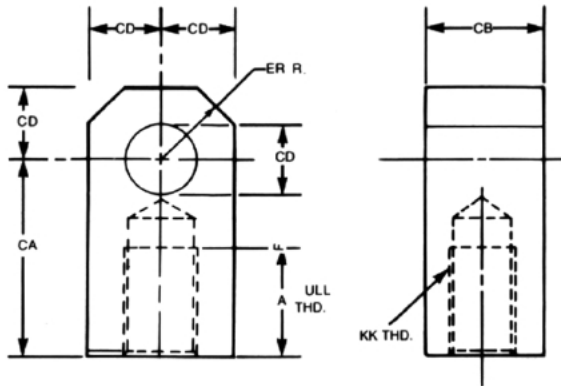
Eye bracket mates with female rod clevis or MP1, MP2 mounts.

Taskmaster® Pneumatic Cylinder

Accessories - 1.5" thru 4" bore

Rexroth
Bosch Group

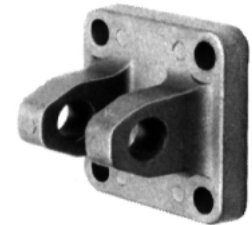
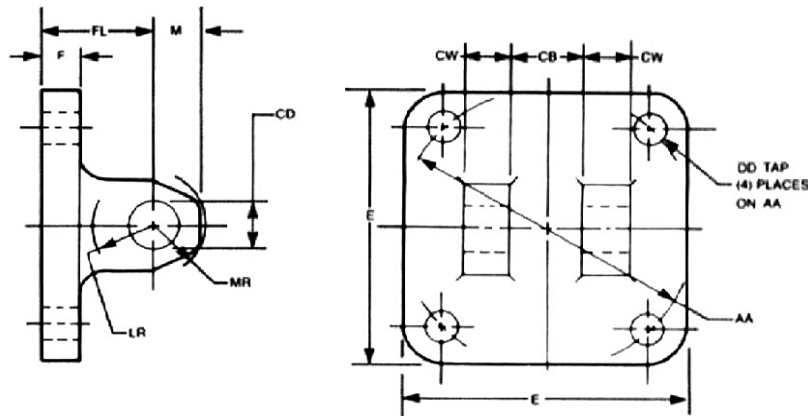
Female Rod Eye (Steel)



PART NO.	BORE	THREAD KK	A	CA	CB	CD	ER	WEIGHT
J -800008-00000	1.5, 2 & 2.5	1/2-20	0.88	1.50	0.75	0.50	0.56	0 lb. 5 oz.
P -059102-00000	3.25 & 4	7/8-14	1.13	2.06	1.25	0.75	0.84	1 lb. 0 oz.

For sizes not shown, see NFPA cylinder accessories.

Clevis Bracket (Aluminum)



PART NO.	WEIGHT	BORE	E	F	M	AA	CB	CD	CW	DD	FL	LR	MR
P -057333-00000	0 lb. 4 oz.	1.50	2.00	0.38	0.50	2.02	0.75	0.50	0.50	0.25	1.13	0.63	0.53
P -057233-00000	0 lb. 4 oz.	2.00	2.50	0.38	0.50	2.60	0.75	0.50	0.50	0.31	1.13	0.63	0.53
P -057344-00000	0 lb. 8 oz.	2.50	3.00	0.38	0.50	3.10	0.75	0.50	0.50	0.31	1.13	0.63	0.53
P -028041-00000	1 lb. 2 oz.	3.25	3.75	0.63	0.75	3.90	1.25	0.75	0.63	0.38	1.88	0.88	0.78
P -028043-00000	1 lb. 8 oz.	4.00	4.50	0.63	0.75	4.70	1.25	0.75	0.63	0.38	1.88	0.88	0.78

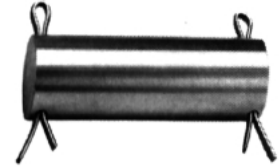
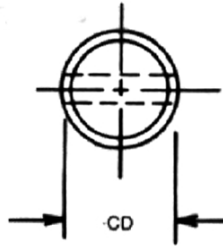
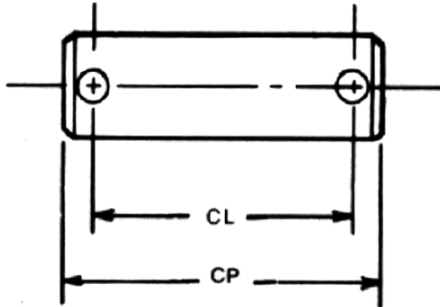
Clevis bracket mates with female rod eye or MP4 mount. For sizes not shown see NFPA cylinder accessories.

Taskmaster® Pneumatic Cylinder

Accessories - 1.5" thru 4" bore

Rexroth
Bosch Group

◆ Pivot Pin (Steel), includes retaining rings



PART NO.	WEIGHT	BORE	CD	CL	CP
J -800017-K0000	0 lb. 4 oz.	1.5, 2 & 2.5	0.50	1.75	2.25
J -800018-K0000	0 lb. 8 oz.	3.25, 4, & 5	0.75	2.50	3.00
J -800019-K0000	0 lb. 13 oz.	6	1.00	3.00	3.63

For sizes not shown see NFPA cylinder accessories.

◆ Right Angle Flow Controls - 540 Series NPTF ports

Mounting directly on cylinder, thread sealant on male threads.

360° swivel compact body.

See SC-400 for additional details.

HOW TO ORDER:	Part Number	Description
	540-603-600-1	Threaded inlet, 1/4" NPTF with screwdriver slot
	540-604-600-1	Threaded inlet, 3/8" NPTF with screwdriver slot
	540-605-600-1	Threaded inlet, 1/2" NPTF with screwdriver slot
	540-613-600-1	Threaded inlet, 1/4" NPTF with knob adjustment
	540-614-600-1	Threaded inlet, 3/8" NPTF with knob adjustment
	540-615-600-1	Threaded inlet, 1/2" NPTF with knob adjustment
	540-623-600-1	Push-in fitting, 1/4" NPTF x 1/4" tube, with slot
	540-624-600-1	Push-in fitting, 3/8" NPTF x 3/8" tube, with slot
	540-633-600-1	Push-in fitting, 1/4" NPTF x 1/4" tube, with knob
	540-634-600-1	Push-in fitting, 3/8" NPTF x 3/8" tube, with knob



Taskmaster® Pneumatic Cylinder

Optional Configurations

Rexroth
Bosch Group

Proximity Switches for 1 1/2" - 4" bore Taskmaster Cylinders

Features	For all bore sizes of Taskmaster Cylinders New, low-profile designs Meets NEMA 1, 4, and 13 Easy to adjust Handles from 24 VDC to 130 VAC LED indicators Built-in surge suppression
Switch specifications	Single pole, normally open 0° F to 160° F



Operation

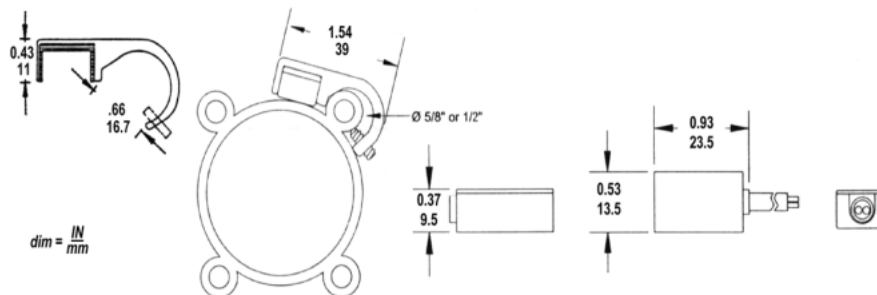
REXROTH magnetically operated Proximity Switches are the normally open, single pole, and single throw style. The switch is designed to close in the presence of a magnetic field, produced by the magnetic piston of the cylinder.
Signals, useful for operating lights, valves, or other devices, are possible anywhere along the stroke of the cylinder.
Multiple switches may be spaced as close as 0.62 inches by using more than one rib of the cylinder for mounting.

Part No.

Symbol	Type	Fig./[mA Rating*]	Part No.	Cable length L [m]
	Reed	2 & 5/[500]	P -026966-00000	Surge suppression, LED, 3' leads
	Reed	2 & 5/[500]	P -026966-00001	Surge suppression, LED, 12' leads
	Reed	2 & 3/[500] ¹	P -026966-00002	Surge suppression, LED, Brad Harrison®1' leads
	Reed	2 & 4/[500] ¹	P -026966-00003	Surge suppression, LED, Molex/GM 4" leads
	Reed	1/[30]	P -026966-00014	3 pin Quick Disconnect (8mm) w/clamp, 6" leads
	Reed	1 & 5/[30]	P -026966-00004	Pigtail, 2 - 3' leads
	Reed	1 & 5/[30]	P -026966-00005	Pigtail, 2 - 12' leads
	NPN	1 & 5/[30]	P -026966-00007	Brad Harrison 1' leads Molex/GM
	NPN	1/[30]	P -026966-00013	9' pigtail
	NPN	1/[30]	P -026966-00016	3 pin Quick Disconnect (8mm) w/clamp, 6" leads
	PNP	1 & 5/[30]	P -026966-00012	9' pigtail
	PNP	1/[30]	P -026966-00015	3 pin Quick Disconnect (8mm) w/clamp, 6" leads

* 500 mA switch can be used with 1 1/2" thru 6" bores. 30mA switches cannot be used with 3 1/4" thru 6" bores.
¹Leads not shown.

Proximity Switch & Clamp - Figure 1

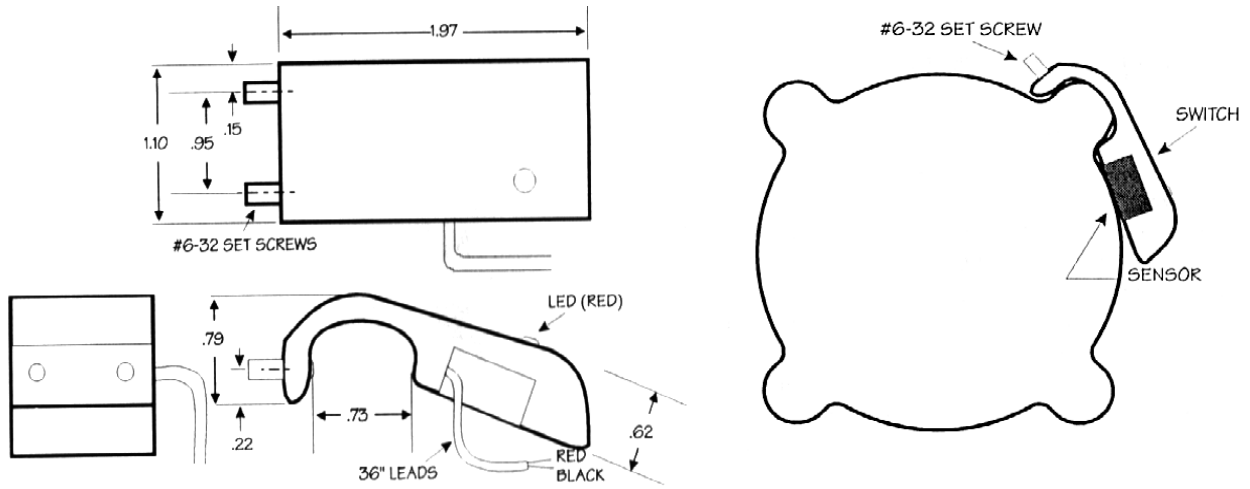


Taskmaster® Pneumatic Cylinder

Optional Configurations

Rexroth
Bosch Group

Proximity Reed Switch & Clamp - Figure 2



Connector styles

Schematic	Figure No.	Description
<p>BRAD HARRISON CONNECTOR</p> <p>12MM MALE PLUG WITH EXTERNAL THREADS CATALOG #804008A09M020. ONE FOOT LONG CABLE.</p>	3	Brad Harrison® style
<p>MOLEX MICRO-C: 12MM INVERTED MALE PLUG GM WINDSOR STANDARD APPROVED MICRO CORDS. MOLEX/GM CONNECTOR</p>	4	Molex/GM style
<p>CABLE SPECIFICATIONS: 22 AWG, 300V, 80', 2 LEADS.</p> <p>PIGTAIL</p> <p>BROWN (POS.) WHITE (NEG.)</p>	5	Pigtail

Taskmaster® Pneumatic Cylinder

Optional Configurations

Rexroth
Bosch Group

Integral Position Sensor

The TASKMASTER Cylinder with Integral Position Sensor includes an internal position sensor (potentiometer) for infinite rod position indication.

Application

Used where knowledge of cylinder position is needed through entire stroke, at a point remote from the cylinder. A voltmeter graduated in inches or percent may be used as a position read-out device.

Integral Position Sensor

Sensor Features

Integrated into cylinder, hence protected from external damage
 Conductive plastic construction
 Resistance approximately 1500 ohms per inch
 Linearity 1 percent of stroke
 Temperature range 0 to 160°F (-40°F optional)

 Maximum power rating 0.1 watts per inch
 Electrical connection: DIN connector (same as Type 740™ Valve)
 Can be checked with simple voltmeters
 Does not require non-rotating rod
 Position sensing is absolute (not incremental); position indication is not lost after power failure.

Cylinder Specifications

1.5" thru 4" bore Taskmaster cylinders

 All standard mounts applicable
 Cushioning available
 Strokes: 4, 6, 8, 10, 12 inches.
 Additional strokes available in 2" increments, 18" maximum.



Part Number and Stroke (KK2 Male rod thread)

Bore	4" stroke	6"	8"	10"	12"
1.50	P -069860-03040	P -069860-03060	P -069860-03080	P -069860-03100	P -069860-03120
2.00	P -069862-03040	P -069862-03060	P -069862-03080	P -069862-03100	P -069862-03120
2.50	P -069866-03040	P -069866-03060	P -069866-03080	P -069866-03100	P -069866-03120
3.25	P -069868-03040	P -069868-03060	P -069868-03080	P -069868-03100	P -069868-03120
4.00	P -069870-03040	P -069870-03060	P -069870-03080	P -069870-03100	P -069870-03120

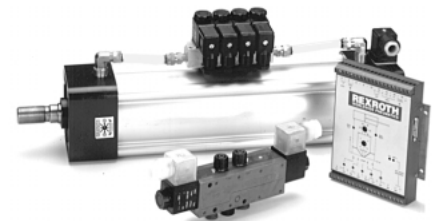
Other rod end thread options are available on request.

Electro-Pneumatic Positioner Specifications

Stroke Any length in 1" increments, to 10"
 2" increments between 10" and 16" strokes
 Accuracy +/- .050" or 1 percent full stroke, whichever is greater
 Repeatability +/- .050"
 Stroking Speed Approx.: Fast 2"/sec., slow .5"/sec.
 Operating Temp. 41°F to 122°F
 Power Requirements 24vdc, 600 ma
 Signal Options 0-10vdc, 0-20ma, 5k ohm pot.
 Feedback Device Linear potentiometer, internally mounted
 Supply Pressure 100 psi nominal, 125 psi max. at 3 micron filtration recommended
 Optional Meter Drive 0-20 ma

Application

Wherever infinite positioning requirements allow electrical analog control signals. Interfaces with computer, PLC or simple potentiometer. Consists of cylinder with integral sensor, optimized valving, and an electronic controller. Available in bore sizes 1-1/2 thru 4" and strokes up to 16"; single or dual stroking speed control available.

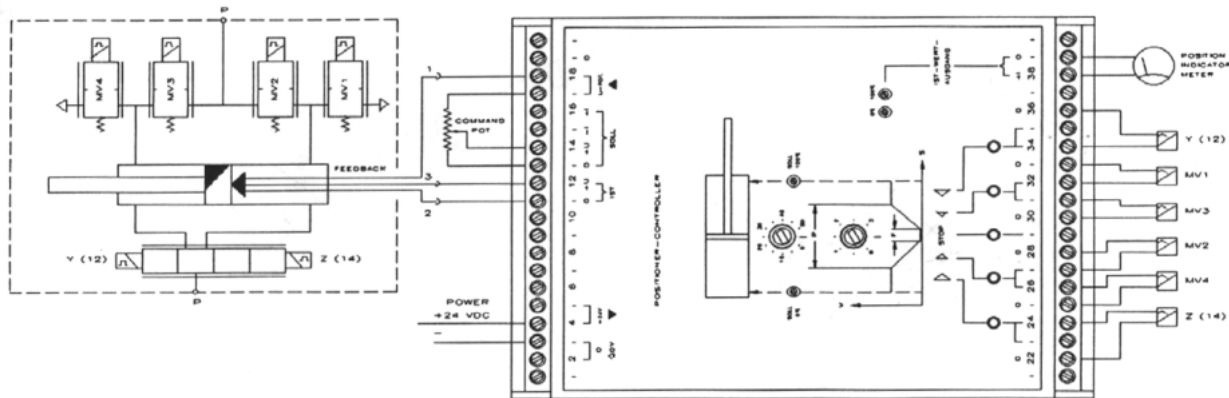


Load Capacities per Bore Size

Bore size (inches)	1.5	2	2.5	3.25	4
Load rating (lbs)	35	63	98	166	250

At 100 psi supply pressure, 1 percent positioning accuracy.

FIGURE 1.



The basic concept involves a cylinder with integral feedback potentiometer in conjunction with a controller and matched solenoid valves. Figure 1 represents the system layout. The figure represents a 2 speed system utilizing (4) 2-way solenoid valves (energized in pairs) for slow speed and a double solenoid, 4-way, closed center for fast speed. The two speed feature offers the fastest response without sacrificing accuracy. The single speed positioners are applied in areas that require accuracy and only slow speed, or fast speeds that do not require 1% accuracy. For single speed applications, only one set of valves is necessary. For the slow retract, (mv1) and (mv3) solenoid valves are energized simultaneously. Valves (mv2) and (mv4) are energized for the slow extend command. The double solenoid valve is energized for either the fast retract or for fast extend. The controller constantly monitors the command signal and compares the feedback signal the position sensor located in the cylinder. If the command signal is greater than the feedback, the controller will energize the solenoid valves associated with extension. The retract solenoid valves are energized when the command signal is less than the feedback signal. If the command equals the feedback signal, all of the solenoid valves are De-energized and position is maintained. The two speed controller consists of a narrow window and a wide window comparator. A large difference between the command and feedback results in energization of both sets of solenoid valves. When the position approaches the set-point command, only the slow speed valves are energized. A unique feature is that each set of solenoids is pulsed before complete shut-off to provide a stepped, gradual deceleration of the load. The width of sensitivity and the width of deceleration is adjustable on the controller to allow tailoring of the positioner for each application.

E-P Positioner Selection

HOW TO SELECT:

1. Determine the amount of force required for the application.
2. Determine the available supply pressure.
3. Note length of stroke required.
4. Check and note accuracy and speed requirements.
5. Determine if meter drive output is desired.
6. Contact sales representative or factory for component selection.

Taskmaster® Pneumatic Cylinder

Optional Configurations

Rexroth
Bosch Group

Taskmaster® Cylinder/Type 740™ Valve Combination Specifications

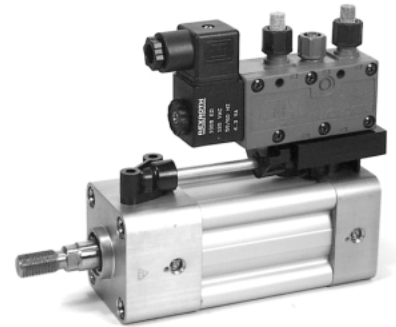
1-1/2", 2", 2-1/2", 3-1/4", & 4" Bore
100" stroke maximum, 1/4" minimum stroke
Male or female rod thread
Pressure: 20 to 150 PSI (2 position valves)
50 to 150 PSI (3 position valves)
Temperature: 5°F to 140°F
Standard Voltages: 6-24 VDC
110-220 VAC

Non-lube cylinder
Positive air cushions at both ends (optional)
Most NFPA mounts

► Features

Air pilot or solenoid operated, single or double
2 position spring returned valve or 3 position closed center valve
Indicator light optionally available
Valve has built in flow controls and integrated fittings
Manual override
Valve mounts at head or cap
Valve has polyacetal body
Corrosion resistant package, pre-lubricated
Reduced air consumption
Simplified customer plumbing
Easy valve interchange (no screws to remove)
Reduce labor cost

Valves are not factory assembled to cylinders. Valve mounting bracket and piping are factory assembled.
Additional Type 740 valve features and specifications may be found in the valve catalog pages.
Select Type 740 valve from the following pages.



► Taskmaster Cylinders with Mounting Bracket and Piping - For TM-8 Series Only*

Base Part Number	Bore	Rod Size	KK2 Male Thread
TM-027924-....	1-1/2	5/8	1/2-20
TM-026049-....	2	5/8	1/2-20
TM-026050-....	2-1/2	5/8	1/2-20
TM-026433-....	3-1/4	1	7/8-14
TM-026481-....	4	1	7/8-14

*TM-1 compliant cylinders are available; see order code.
These TM-8 compliant cylinders include valve mounting bracket complete with tubing.
Above cylinders are modified to accept mounting bracket.
Standard Taskmaster cylinders may be modified by ordering field mounting kit,
Part Number P -026300-00000 (does not contain piping from head to cap).
Estimated operating speeds in inches per second at 100 PSI are: 1-1/2" bore,
50; 2", 28; 2-1/2", 18; 3-1/4", 9; and 4", 7.

◆ How to Order Type 740™ Combinations

Select the appropriate part number from the list and add the 4-digit suffix which describes cushioning and stroke. Order mounting kits separately.

4-DIGIT SUFFIX EXPLANATION

The first digit indicates the degree of cushioning...

- 0-Noncushioned
- 1-Cushioned in head end only
- 2-Cushioned in cap end only
- 3-Cushioned in both ends

Second and third digits are used to indicate the stroke in inches.

Fourth digit is used to indicate additional eighths of an inch of stroke.

EXAMPLE: Both ends cushioned, 10-1/2 stroke, 1-1/2 bore, KK2 THD would be TM-027924-03104

Taskmaster® Pneumatic Cylinder

Optional Configurations

Rexroth
Bosch Group

Type 740™ Valve Options

Type		Diaphragm poppet valve
Pressure range	Minimum Maximum	20 psi 150 psi
Flow		$C_v = 1.3$
Temperature range	Solenoid Air Pilot	5°F to 122°F 5°F to 140°F
Medium		Compressed air, lubricated or non-lubricated
Port sizes		3/8"; 5/16" and 8 mm also available [not shown]
Materials	Body / Seals	Polyacetal plastic w/ Buna N seals
Operating voltages		DC ± 10 % AC - 20 % + 10 %
	50 Hz 60 Hz	AC - 10 % + 20 %
Power consumption	DC 24 V	2,14 W
Inrush power	AC 220/230 V 50/60 Hz	6,60 / 5,50 VA
Holding power	AC 220/230 V 50/60 Hz	4,18 / 3,30 VA
Protection with el. connector		NEMA 4 [IP 65 to DIN VDE 0470]
Duty cycle	ED	100 %
Switching times	t_{on}	18 ms
[24VDC at 85 psi]	t_{off}	32 ms



Note

Electrical connectors must be ordered separately; one per solenoid required.
For entire line of Type 740 Valve options and accessories, see SC-300 catalog.

Type 740 Valve Air Pilots

Part Number	Description
P -067698-00000	Single Air Pilot, Spring return
P -067770-00000	Double Air Pilot, 2 Position

Type 740 Valve 2 Position

Single Solenoid, Air Spring Return	Description	Double Solenoid
PW-067697-00001	110V./50-60 Hz	PW-067715-00001
PW-067697-00002	220V./50-60 Hz	PW-067715-00002
PW-067697-00003	6V./DC	PW-067715-00003
PW-067697-00004	12V./DC	PW-067715-00004
PW-067697-00005	24V./DC	PW-067715-00005
PW-067697-00006	24V. AC/50-60 Hz	PW-067715-00006

Type 740 Valve 3 Position Double Solenoid

Closed Center	Description	Exhaust Open Center
PW-067717-00001	110V./50-60 Hz	PW-067716-00001
PW-067717-00002	220V./50-60 Hz	PW-067716-00002
PW-067717-00003	6V./DC	PW-067716-00003
PW-067717-00004	12V./DC	PW-067716-00004
PW-067717-00005	24V./DC	PW-067716-00005
PW-067717-00006	24V. AC/50-60 Hz	PW-067716-00006

Caution: Simultaneous activation of both solenoids will provide full supply pressure to both delivery and exhaust ports. Care should be taken to avoid applications where a back pressure spike can occur from heavy inertia loads.

Solenoid Connectors - Order One per Solenoid

Strain Relief Connectors	Description	1/2" Conduit Connectors*
H -894100-00302	Non-lighted	-
P -067325-00000	Non-lighted for Wireways	-
-	Metallic Non-lighted	P -069707-00000
-	Non-lighted Molded Plastic	P -069390-00000
P -067261-00000	120 VAC Lighted Connector	P -026078-00001
P -067262-00000	240 VAC Lighted Connector	P -026078-00002
P -067264-00000	12 VDC Lighted Connector	P -026078-00004
P -067265-00000	24 VDC Lighted Connector	P -026078-00005
P -069417-00000	24 VAC Lighted Connector	P -026078-00006

*CSA approved.