

## NEG

NFPA Standard



### Specifications

Bore(mm)	20(3/4")	25(1")	32(1-1/4")	40(1-1/2")	50(2")	63(2-1/2")
Acting type	Double Acting					
Working medium	Clean air(40 μ m filtration)					
Pressure range(psi)	15~145					
Garanteed pressure(psi)	215					
Working temperature	-20~70°C ( -4~176 F ) (No freezing)					
Speed range(mm/s)	50~1000					
Stroke tolerance(mm)	+1.4 0					
Cushion type	Rubber cushion(Standard) /Air cushion(Optional,Currently developed only 63mm bore)					
Port size	M5	NPT1/8			NPT1/4	
Magnet switch	HX-13					

### How to Order?

Series No	Type No	Bore	X	Stroke	- Magnet No -	Piston Rod Thread Type	- Thread Type
NEG (North America Standard)	Blank: Basic type C: Air cushion type	20(3/4") 25(1") 32(1-1/4") 40(1-1/2") 50(2") 63(2-1/2")	*	*Stroke length must be indicated as 4 digits. First and second digit:Stroke/Inch Third and fourth digit:Stroke/Hundredth of an inch Example) 0525=5.25(5-1/4) inch stroke Details in stroke chart	Blank: No magnet S : With magnet	M : Male thread	Blank: NPT

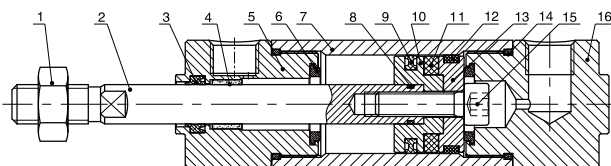
#### Order Example:

NEG Series basic type cylinder, 25mm bore, 2 inch stroke, with magnet, male thread on piston rod, NPT thread.  
ERP code is: NEG25X0200-S-M

### Stroke

Bore(mm)	Standard Stroke (inch)												Long Stroke (inch)	
	1	2	3	4	5	6	7	8	9	10	11	12		
20														8.01~47
25														12.01~47
32														12.01~59
40														12.01~59
50														12.01~59
63														12.01~59

### Internal Structure



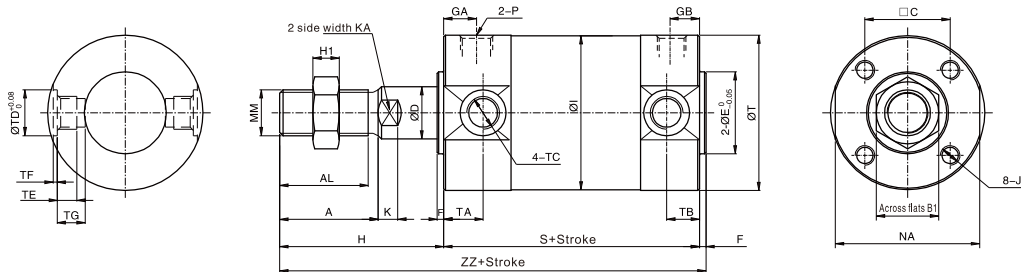
NO.	Part Name	Material
1	Nut	Carbon steel
2	Piston rod	Stainless steel(NEG20, 25)
		Carbon steel(NEG32, 40, 50, 63)
3	Piston rod seal	TPU
4	Self-lubricating bearing	Compound material
5	Head cover	Aluminum alloy
6	Rubber cushion	TPU
7	Barrel	Aluminum alloy
8	O-ring	NBR
9	Piston seal	NBR
10	Piston	Aluminum alloy
11	Magnet	RbFeB(NEG20, 25)
		Plastic(NEG32, 40, 50, 63)
12	Wear ring	PTFE
13	Magnet base	Aluminum alloy
14	O-ring	NBR
15	Hex cylinder head screw	Carbon steel
16	Rear cover	Aluminum alloy

# NEG Series NFPA Standard Repairable Cylinder



## Main Dimension

NEG



(Inch)

Bore	Standard Stroke Range	Long Stroke Range	A	AL	B1	C	D	E	F	H	I	J	K	KA	MM	NA
20	Up to 8	8.01 to 14	0.55	0.50	0.39	0.55	0.315	0.472	0.08	1.00	1.02	#8-32UNC depth0.28	0.16	0.24	1/4-28UNF	0.94
25	Up to 12	12.01 to 16	0.55	0.50	0.51	0.65	0.394	0.551	0.08	1.12	1.22	#10-32UNF depth0.30	0.20	0.31	5/16-24UNF	1.14
32	Up to 12	12.01 to 18	0.83	0.75	0.67	0.79	0.472	0.709	0.08	1.63	1.50	#10-32UNF depth0.30	0.22	0.39	7/16-20UNF	1.40
40	Up to 12	12.01 to 32	0.83	0.75	0.67	1.02	0.630	0.984	0.08	1.63	1.85	1/4-28UNF depth0.47	0.30	0.55	7/16-20UNF	1.73
50	Up to 12	12.01 to 48	0.96	0.88	0.75	1.26	0.787	1.181	0.08	2.07	2.28	5/16-24UNF depth0.63	0.30	0.71	1/2-20UNF	2.17
63	Up to 12	12.01 to 48	0.96	0.88	0.75	1.50	0.787	1.260	0.08	2.07	2.83	3/8-24UNF depth0.63	0.30	0.71	1/2-20UNF	2.72
Bore	Standard Stroke Range	Long Stroke Range	P	S	GA	GB	T	H1	TA	TB	ZZ	TD	TF	TE	TG	TC
20	Up to 8	8.01 to 14	M5X0.8	2.72(3.03)	0.531	0.531	1.04	0.157	0.43	0.43	3.80(4.11)	0.315	0.02	0.16	0.22	M5X0.8
25	Up to 12	12.01 to 16	NPT1/8	2.72(3.03)	0.393	0.393	1.24	0.197	0.43	0.43	3.92(4.23)	0.394	0.04	0.20	0.26	M6X0.75
32	Up to 12	12.01 to 18	NPT1/8	2.80(3.11)	0.413	0.371	1.51	0.236	0.43	0.39	4.51(4.82)	0.472	0.04	0.22	0.30	M8X1.0
40	Up to 12	12.01 to 32	NPT1/8	3.07(3.42)	0.452	0.393	1.87	0.236	0.47	0.39	4.78(5.13)	0.551	0.05	0.24	0.33	M10X1.25
50	Up to 12	12.01 to 48	NPT1/4	3.54(4.01)	0.512	0.512	2.30	0.315	0.51	0.47	5.69(6.16)	0.630	0.08	0.30	0.39	M12X1.25
63	Up to 12	12.01 to 48	NPT1/4	3.54(4.01)	0.551	0.472	2.85	0.315	0.51	0.47	5.69(6.16)	0.709	0.12	0.45	0.57	M14X1.5

Note: 1. With magnet and without magnet, the dimensions are same.  
2. Within the ("") size is the size of long stroke;