



# MFD Rotary Actuator



## Engineering Specifications

Model	10	20	30	50
Action	Double Rack and Pinion (Double Acting)			
Fluid	Air (clean/dry)			
Pressure Range	Bolt Adjustment	15 to 145 PSI		
	Shock Absorbers	15 to 87 PSI		
Proof Pressure	218 PSI			
Temperature Range	32 to 140 °F			
Angle Adjustment	190° Max Rotation			
Repeatable Precision	Bolt Adjustment	0.2°		
	Shock Absorber	0.05°		
Cushion Type	Bolt Adjustment	Rubber Bumper		
	Shock Absorber	Shock Absorber		
Port Size	M5X0.8		End Ports 1/8"-NPT Side Port M5X0.8	

## Dimensions (mm)

Model	A	B	C (H9)	D	E	F (H9)	G	H	J	K	L	M	N (H9)
10	M8X1.25	12	15	3	19	3	3.5	5	29	M10x1.0	M5X0.8	4.5	46
20	M10X1.5	15	17	2.5	24	4	4.5	9	30	M12x1.0	M5X0.8	6	61
30	M10X1.5	15	22	3	28	4	4.5	9	34	M12X1.0	M5X0.8	6.5	67
50	M12X1.75	18	26	3	33	5	5.5	10	38	M14X1.5	M5X0.8	10	77

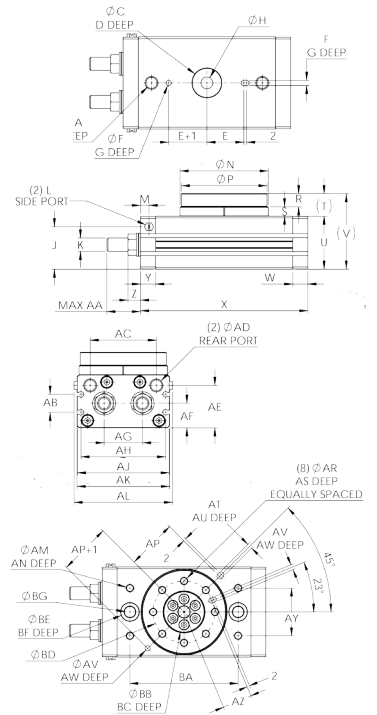
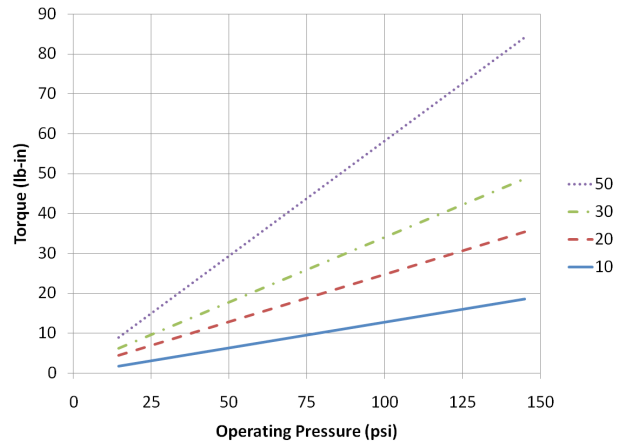
Model	P (H9)	R	S	T	U	V	W	X	Y	Z	AA		AB
											Bolt Adj.	Shock Abs.	
10	45	8	4.5	13	34	47	9.5	92	9.5	9.5	17.5	28.5	13.5
20	60	10	6.5	17	37	54	11	117	11	9.5	26	39.5	12
30	65	10	6.5	17	40	57	11.5	127	11.5	9.5	25.5	39	13.5
50	75	12	7.5	20	46	66	15	152	15	14	31.5	51	15

Model	AC	AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AR
10	34.5	M5X0.8	27.8	15.5	20.5	45	49.5	50	54.5	M5X0.8	8	27	M5X0.8
20	47	M5X0.8	30	16	27.5	59	64.5	65	69.5	M6X1.0	8	36	M6X1.0
30	50	1/8" NPT	32	18.5	29	64	69.5	70	74.5	M6X1.0	8	39	M6X1.0
50	63	1/8" NPT	38	22	38	74.5	79.5	80	84.5	M8X1.25	8	45	M8X1.25

Model	AS	AT (H9)	AU	AV (H9)	AW	AY	AZ	BA	BB (H9)	BC	BD	BE	BF	BG
10	8	3	3.5	3	3.5	27	15	60	20	4.5	32	11	6.5	6.8
20	10	4	4.5	4	4.5	34	20.5	76	28	6.5	43	14	8.5	8.6
30	10	4	4.5	4	5	37	23	84	32	5	48	14	8.5	8.6
50	12	5	5.5	5	6	50	26.5	100	35	5.5	55	18	10.5	10.5

## How to Order MHRQ20 - A

MODEL	CUSHION TYPE
10	Blank - Bolt Adjustment A - Shock Absorber
20	
30	
50	



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Leaders in Actuation.

PB-MFDRA-0714

To learn more about this product, scan this QR code with your mobile device.



# Track-Mounted Switch



# MFD



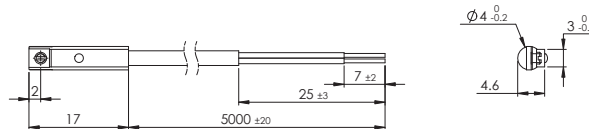
## How to Order

Two-Wire Reed Switches	
Model Number	Description
MCS1-H-010	2-wire reed switch; 1 meter leads
Three-Wire Solid State Switches	
Model Number	Description
MDS1-HN-050	3-wire solid state switch; 5 meter leads; NPN (sinking)
MDS1-HP-050	3-wire solid state switch; 5 meter leads; PNP (sourcing)

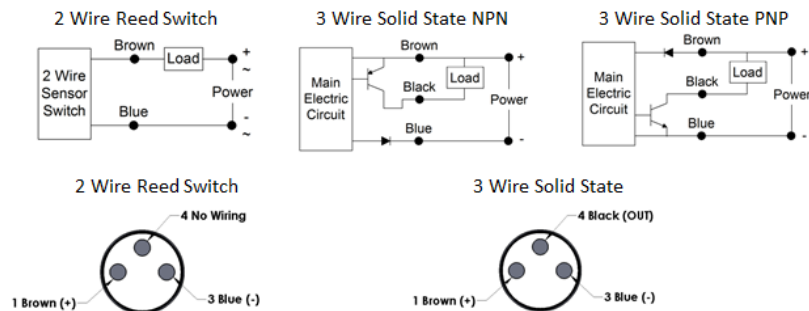
## Specifications

Item/Type	MCS1-H	MDS1-HN	MDS1-HP
Switch Logic	SPST Normally Open Type	Transistor without contact, Normally Open Type	
Sensor Type	Reed Switch	NPN Type	PNP Type
Operating Voltage (V)	5-120V AC/DC	5-30V DC	
Max. Switching Current (mA)	50	200	
Switching Rating (W)	6 max.	6 max.	
Current Consumption	--	15mA Max. @ 24V	
Voltage Drop	3.0V Max.	0.5V Max. @ 200mA DC	
Cable	Ø2.8, Polyurethane	Ø3.3C, Black Oil Resistant PVC	
Indicator	Red LED		
Leakage Current	--	0.01mA Max.	
Sensitivity (Gauss)	40	60-75	
Max. Frequency (Hz)	200	1000	
Shock (m/s <sup>2</sup> )	300	500	
Vibration (m/s <sup>2</sup> )	90		
Temperature Range (°C)	-10 to 70		
Enclosure Classification	IP67 (NEMA6)		
Protection Circuit	None	Power Reverse Polarity, Surge Suppression	

## Dimensions (mm)



## Wiring Diagram



## Leaders in Actuation.

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