

Actuator Specifications - Standard Ratio

Actuator Code	Switch Type	Maximum Operating Force grams	Maximum Pre-Travel mm (in)	Operating Point mm (in)	Minimum Over-Travel mm (in)	Max. Movement Differential mm (in)	Max. Rest Position mm (in)	Actuation Length mm (in)	Actuator Only Part Number	
AA	DB5	70	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.10 (0.004)	9.3 (0.366)	--		
	DB1/3	150	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.10 (0.004)	9.3 (0.366)			
	DB6	150	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.15 (0.006)	9.3 (0.366)			
	DB2	250	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.10 (0.004)	9.3 (0.366)			
	DB7	280	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.15 (0.006)	9.3 (0.366)			
BA	DB5	70	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.10 (0.004)	9.3 (0.366)	--		
	DB1/3	150	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.10 (0.004)	9.3 (0.366)			
	DB6	150	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.15 (0.006)	9.3 (0.366)			
	DB2	250	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.10 (0.004)	9.3 (0.366)			
	DB7	280	1.0 (0.039)	8.4 ± 0.3 (0.331 ± 0.012)	0.6 (0.024)	0.15 (0.006)	9.3 (0.366)			
LB	DB5	30	4.0 (0.157)	10.7 ± 1.3 (0.421 ± 0.051)	2.0 (0.079)	0.5 (0.020)	14.0 (0.551)	4.8 (0.189) 614-1232		
	DB1/3	60	4.0 (0.157)	10.7 ± 1.3 (0.421 ± 0.051)	2.0 (0.079)	0.5 (0.020)	14.0 (0.551)			
	DB6	60	4.0 (0.157)	10.7 ± 1.3 (0.421 ± 0.051)	2.0 (0.079)	0.75 (0.030)	14.0 (0.551)			
	DB2	100	4.5 (0.177)	10.7 ± 1.6 (0.421 ± 0.063)	1.5 (0.059)	0.70 (0.028)	14.0 (0.551)			
	DB7	115	4.5 (0.177)	10.7 ± 1.6 (0.421 ± 0.063)	1.5 (0.059)	0.75 (0.030)	14.0 (0.551)			
LC	DB5	25	4.5 (0.177)	11.1 ± 1.5 (0.437 ± 0.059)	2.0 (0.079)	0.6 (0.024)	15.0 (0.591)	7.0 (0.276) 614-1233		
	DB1/3	50	4.5 (0.177)	11.1 ± 1.5 (0.437 ± 0.059)	2.0 (0.079)	0.6 (0.024)	15.0 (0.591)			
	DB6	50	4.5 (0.177)	11.1 ± 1.5 (0.437 ± 0.059)	2.0 (0.079)	1.2 (0.048)	15.0 (0.591)			
	DB2	85	5.0 (0.197)	11.1 ± 1.8 (0.437 ± 0.071)	1.5 (0.059)	1.0 (0.039)	15.0 (0.591)			
	DB7	100	5.0 (0.197)	11.1 ± 1.8 (0.437 ± 0.071)	1.5 (0.059)	1.2 (0.048)	15.0 (0.591)			
LD	DB5	9	15.0 (0.591)	13.0 ± 3.5 (0.512 ± 0.138)	4.0 (0.157)	4.5 (0.177)	27.0 (1.063)	42.0 (1.654) 614-1234		
	DB1/3	18	15.0 (0.591)	13.0 ± 3.5 (0.512 ± 0.138)	4.0 (0.157)	4.5 (0.177)	27.0 (1.063)			
	DB6	18	15.0 (0.591)	13.0 ± 3.5 (0.512 ± 0.138)	4.0 (0.157)	6.8 (0.268)	27.0 (1.063)			
	DB7	on request								
	SB	DB5	30	4.0 (0.157)	16.0 ± 1.3 (0.630 ± 0.051)	2.0 (0.079)	0.5 (0.020)	19.0 (0.748)	614-1237	
	DB1/3	65	4.0 (0.157)	16.0 ± 1.3 (0.630 ± 0.051)	2.0 (0.079)	0.5 (0.020)	19.0 (0.748)			
	DB6	65	4.0 (0.157)	16.0 ± 1.3 (0.630 ± 0.051)	2.0 (0.079)	1.1 (0.043)	19.0 (0.748)			
	DB2	110	4.5 (0.177)	16.0 ± 1.6 (0.630 ± 0.063)	1.5 (0.059)	0.7 (0.028)	19.0 (0.748)			
	DB7	125	4.5 (0.177)	16.0 ± 1.6 (0.630 ± 0.063)	1.5 (0.059)	1.1 (0.043)	19.0 (0.748)			
SC	DB5	25	4.5 (0.177)	16.4 ± 1.5 (0.646 ± 0.059)	2.0 (0.079)	0.6 (0.024)	20.0 (0.787)	4.7 (0.185) 614-1238		
	DB1/3	55	4.5 (0.177)	16.4 ± 1.5 (0.646 ± 0.059)	2.0 (0.079)	0.6 (0.024)	20.0 (0.787)			
	DB6	55	4.5 (0.177)	16.4 ± 1.5 (0.646 ± 0.059)	2.0 (0.079)	1.2 (0.048)	20.0 (0.787)			
	DB2	95	5.0 (0.197)	16.4 ± 1.8 (0.646 ± 0.071)	1.5 (0.059)	1.0 (0.039)	20.0 (0.787)			
	DB7	110	5.0 (0.197)	16.4 ± 1.8 (0.646 ± 0.071)	1.5 (0.059)	1.2 (0.048)	20.0 (0.787)			
SD	DB5	9	15.0 (0.591)	18.3 ± 3.5 (0.720 ± 0.138)	4.0 (0.157)	4.5 (0.177)	32.0 (1.260)	39.7 (1.563) 614-1239		
	DB1/3	20	15.0 (0.591)	18.3 ± 3.5 (0.720 ± 0.138)	4.0 (0.157)	4.5 (0.177)	32.0 (1.260)			
	DB6	20	15.0 (0.591)	18.3 ± 3.5 (0.720 ± 0.138)	4.0 (0.157)	6.8 (0.268)	32.0 (1.260)			
	DB7	on request								
	RB	DB5	30	4.0 (0.157)	15.8 ± 1.3 (0.622 ± 0.051)	2.0 (0.079)	0.5 (0.020)	19.0 (0.748)	714-0260	
	DB1/3	65	4.0 (0.157)	15.8 ± 1.3 (0.622 ± 0.051)	2.0 (0.079)	0.5 (0.020)	19.0 (0.748)			
	DB6	65	4.0 (0.157)	15.8 ± 1.3 (0.622 ± 0.051)	2.0 (0.079)	0.75 (0.030)	19.0 (0.748)			
	DB2	110	4.5 (0.177)	15.8 ± 1.6 (0.622 ± 0.063)	1.5 (0.059)	0.70 (0.028)	19.0 (0.748)			
	DB7	125	4.5 (0.177)	15.8 ± 1.6 (0.622 ± 0.063)	1.5 (0.059)	0.75 (0.030)	19.0 (0.748)			
RC	DB5	25	4.5 (0.177)	16.2 ± 1.5 (0.638 ± 0.059)	2.0 (0.079)	0.6 (0.024)	20.0 (0.787)	714-0261		
	DB1/3	55	4.5 (0.177)	16.2 ± 1.5 (0.638 ± 0.059)	2.0 (0.079)	0.6 (0.024)	20.0 (0.787)			
	DB6	55	4.5 (0.177)	16.2 ± 1.5 (0.638 ± 0.059)	2.0 (0.079)	1.2 (0.048)	20.0 (0.787)			
	DB2	95	5.0 (0.197)	16.2 ± 1.8 (0.638 ± 0.071)	1.5 (0.059)	1.0 (0.039)	20.0 (0.787)			
	DB7	110	5.0 (0.197)	16.2 ± 1.8 (0.638 ± 0.071)	1.5 (0.059)	1.2 (0.048)	20.0 (0.787)			
RD	DB5	9	15.0 (0.591)	18.1 ± 3.5 (0.713 ± 0.138)	4.0 (0.157)	4.5 (0.177)	32.0 (1.260)	39.7 (1.563) 714-0262		
	DB1/3	20	15.0 (0.591)	18.1 ± 3.5 (0.713 ± 0.138)	4.0 (0.157)	4.5 (0.177)	32.0 (1.260)			
	DB6	20	15.0 (0.591)	18.1 ± 3.5 (0.713 ± 0.138)	4.0 (0.157)	6.8 (0.268)	32.0 (1.260)			
	DB7	on request								
	WB*	DB5	24	4.5 (0.177)	11.1 ± 1.5 (0.437 ± 0.059)	2.0 (0.079)	0.6 (0.024)	15.0 (0.591)	7.0 (0.276) 614-1247	
	DB1/3	50	4.5 (0.177)	11.1 ± 1.5 (0.437 ± 0.059)	2.0 (0.079)	0.6 (0.024)	15.0 (0.591)			
	DB6	50	4.5 (0.177)	11.1 ± 1.5 (0.437 ± 0.059)	2.0 (0.079)	0.9 (0.035)	15.0 (0.591)			
	DB2	85	4.5 (0.177)	11.1 ± 1.5 (0.437 ± 0.059)	2.0 (0.079)	0.6 (0.024)	15.0 (0.591)			
	DB7	100	4.5 (0.177)	11.1 ± 1.5 (0.437 ± 0.059)	2.0 (0.079)	0.9 (0.035)	15.0 (0.591)			
WC*	DB5	18	6.0 (0.236)	12.2 ± 1.8 (0.480 ± 0.071)	3.0 (0.118)	0.8 (0.031)	17.0 (0.669)	14.0 (0.551) 614-1253		
	DB1/3	38	6.0 (0.236)	12.2 ± 1.8 (0.480 ± 0.071)	3.0 (0.118)	0.8 (0.031)	17.0 (0.669)			
	DB6	38	6.0 (0.236)	12.2 ± 1.8 (0.480 ± 0.071)	3.0 (0.118)	1.2 (0.047)	17.0 (0.669)			
	DB2	63	6.0 (0.236)	12.2 ± 1.8 (0.480 ± 0.071)	3.0 (0.118)	0.8 (0.031)	17.0 (0.669)			
	DB7	75	6.0 (0.236)	12.2 ± 1.8 (0.480 ± 0.071)	3.0 (0.118)	1.2 (0.047)	17.0 (0.669)			
VB*	DB5	25	4.5 (0.177)	11.9 ± 1.4 (0.469 ± 0.055)	2.0 (0.079)	0.6 (0.024)	15.0 (0.591)	5.6 (0.220) 714-0299		
	DB1/3	55	4.5 (0.177)	11.9 ± 1.4 (0.469 ± 0.055)	2.0 (0.079)	0.6 (0.024)	15.0 (0.591)			
	DB6	55	4.5 (0.177)	11.9 ± 1.4 (0.469 ± 0.055)	2.0 (0.079)	0.9 (0.035)	15.0 (0.591)			
	DB2	90	4.5 (0.177)	11.9 ± 1.4 (0.469 ± 0.055)	2.0 (0.079)	0.6 (0.024)	15.0 (0.591)			
	DB7	105	4.5 (0.177)	11.9 ± 1.4 (0.469 ± 0.055)	2.0 (0.079)	0.9 (0.035)	15.0 (0.591)			
ZB*	DB5	25	4.5 (0.177)	16.0 ± 1.4 (0.630 ± 0.055)	1.5 (0.059)	0.6 (0.024)	19.0 (0.748)	5.2 (0.205) 614-1249		
	DB1/3	55	4.5 (0.177)	16.0 ± 1.4 (0.630 ± 0.055)	1.5 (0.059)	0.6 (0.024)	19.0 (0.748)			
	DB6	55	4.5 (0.177)	16.0 ± 1.4 (0.630 ± 0.055)	1.5 (0.059)	0.9 (0.035)	19.0 (0.748)			
	DB2	90	4.5 (0.177)	16.0 ± 1.4 (0.630 ± 0.055)	1.5 (0.059)	0.6 (0.024)	19.0 (0.748)			
	DB7	105	4.5 (0.177)	16.0 ± 1.4 (0.630 ± 0.055)	1.5 (0.059)	0.9 (0.035)	19.0 (0.748)			

* For 85 °C only; plastic

ZF Electronics Systems Pleasant Prairie, LLC ("ZF") acquired the rights to the CHERRY branded switches and sensors in 2008.

Although ZF divested its interest in the CHERRY name in 2015, the switches and sensors remain unchanged and are now sold under the ZF brand.



Actuator Specifications - High Ratio

Actuator Code	Switch Type	Maximum Operating Force grams	Maximum Pre-Travel mm (in)	Operating Point mm (in)	Minimum Over-Travel mm (in)	Max. Movement Differential mm (in)	Max. Rest Position mm (in)	Actuation Length mm (in)	Actuator Only Part Number
MB	DB5	12	9.0 (0.354)	12.0 ± 2.5 (0.472 ± 0.098)	3.5 (0.1				

Subminiature Snap Switch

Single Pole DB Series

Actuators

DB2	40	9.0 (0.354)	12.0 ± 3.0 (0.472 ± 0.118)	3.5 (0.138)	1.5 (0.059)	18.0 (0.709)	
DB7	45	9.0 (0.354)	12.0 ± 3.0 (0.472 ± 0.118)	3.5 (0.138)	1.8 (0.071)	18.0 (0.709)	
MC	DB5	10	10.0 (0.394)	12.5 ± 3.0 (0.492 ± 0.118)	4.0 (0.157)	1.4 (0.055)	20.0 (0.787)
	DB1/3	22	10.0 (0.394)	12.5 ± 3.0 (0.492 ± 0.118)	4.0 (0.157)	1.4 (0.055)	20.0 (0.787)
	DB6	22	10.0 (0.394)	12.5 ± 3.0 (0.492 ± 0.118)	4.0 (0.157)	2.1 (0.083)	20.0 (0.787)
	DB2	35	10.0 (0.394)	12.5 ± 3.5 (0.492 ± 0.138)	4.0 (0.157)	1.8 (0.071)	20.0 (0.787)
	DB7	40	10.0 (0.394)	12.5 ± 3.5 (0.492 ± 0.138)	4.0 (0.157)	2.1 (0.083)	20.0 (0.787)
MD	DB5	4	27.0 (1.063)	18.0 ± 8.0 (0.709 ± 0.315)	10.0 (0.394)	6.0 (0.236)	40.0 (1.575)
	DB1/3	9	27.0 (1.063)	18.0 ± 8.0 (0.709 ± 0.315)	10.0 (0.394)	6.0 (0.236)	40.0 (1.575)
	DB6	9	27.0 (1.063)	18.0 ± 8.0 (0.709 ± 0.315)	10.0 (0.394)	9.0 (0.354)	40.0 (1.575)
	DB2/7	--	--	--	--	--	
UB	DB5	14	9.0 (0.354)	17.2 ± 2.5 (0.677 ± 0.098)	3.5 (0.138)	1.2 (0.047)	22.0 (0.866)
	DB1/3	30	9.0 (0.354)	17.2 ± 2.5 (0.677 ± 0.098)	3.5 (0.138)	1.2 (0.047)	22.0 (0.866)
	DB6	30	9.0 (0.354)	17.2 ± 2.5 (0.677 ± 0.098)	3.5 (0.138)	1.8 (0.071)	22.0 (0.866)
	DB2	50	9.0 (0.354)	17.2 ± 3.0 (0.677 ± 0.118)	3.5 (0.138)	1.5 (0.059)	22.0 (0.866)
	DB7	56	9.0 (0.354)	17.2 ± 3.0 (0.677 ± 0.118)	3.5 (0.138)	1.8 (0.071)	22.0 (0.866)
UC	DB5	12	10.0 (0.394)	17.7 ± 3.0 (0.697 ± 0.118)	4.0 (0.157)	1.4 (0.055)	24.0 (0.945)
	DB1/3	25	10.0 (0.394)	17.7 ± 3.0 (0.697 ± 0.118)	4.0 (0.157)	1.4 (0.055)	24.0 (0.945)
	DB6	25	10.0 (0.394)	17.7 ± 3.0 (0.697 ± 0.118)	4.0 (0.157)	2.1 (0.083)	24.0 (0.945)
	DB2	40	10.0 (0.394)	17.7 ± 3.0 (0.697 ± 0.118)	4.0 (0.157)	1.8 (0.071)	24.0 (0.945)
	DB7	45	10.0 (0.394)	17.7 ± 3.0 (0.697 ± 0.118)	4.0 (0.157)	2.1 (0.083)	24.0 (0.945)
UD	DB5	4	27.0 (1.063)	23.2 ± 8.0 (0.913 ± 0.315)	10.0 (0.394)	6.0 (0.236)	44.0 (1.732)
	DB1/3	9	27.0 (1.063)	23.2 ± 8.0 (0.913 ± 0.315)	10.0 (0.394)	6.0 (0.236)	44.0 (1.732)
	DB6	9	27.0 (1.063)	23.2 ± 8.0 (0.913 ± 0.315)	10.0 (0.394)	9.0 (0.354)	44.0 (1.732)
	DB2/7	--	--	--	--	--	
TB	DB5	14	9.0 (0.354)	17.0 ± 2.5 (0.669 ± 0.098)	3.5 (0.138)	1.2 (0.047)	22.0 (0.866)
	DB1/3	30	9.0 (0.354)	17.0 ± 2.5 (0.669 ± 0.098)	3.5 (0.138)	1.2 (0.047)	22.0 (0.866)
	DB6	30	9.0 (0.354)	17.0 ± 2.5 (0.669 ± 0.098)	3.5 (0.138)	1.8 (0.071)	22.0 (0.866)
	DB2	50	9.0 (0.354)	17.0 ± 3.0 (0.669 ± 0.118)	3.5 (0.138)	1.5 (0.059)	22.0 (0.866)
	DB7	56	9.0 (0.354)	17.0 ± 3.0 (0.669 ± 0.118)	3.5 (0.138)	1.8 (0.071)	22.0 (0.866)
TC	DB5	12	10.0 (0.394)	17.5 ± 3.0 (0.689 ± 0.118)	4.0 (0.157)	1.4 (0.055)	24.0 (0.945)
	DB1/3	25	10.0 (0.394)	17.5 ± 3.0 (0.689 ± 0.118)	4.0 (0.157)	1.4 (0.055)	24.0 (0.945)
	DB6	25	10.0 (0.394)	17.5 ± 3.0 (0.689 ± 0.118)	4.0 (0.157)	2.1 (0.083)	24.0 (0.945)
	DB2	40	10.0 (0.394)	17.5 ± 3.5 (0.689 ± 0.138)	4.0 (0.157)	1.8 (0.071)	24.0 (0.945)
	DB7	45	10.0 (0.394)	17.5 ± 3.5 (0.689 ± 0.138)	4.0 (0.157)	2.1 (0.083)	24.0 (0.945)
TD	DB5	4	27.0 (1.063)	23.0 ± 8.0 (0.906 ± 0.315)	10.0 (0.394)	6.0 (0.236)	44.0 (1.732)
	DB1/3	9	27.0 (1.063)	23.0 ± 8.0 (0.906 ± 0.315)	10.0 (0.394)	6.0 (0.236)	44.0 (1.732)
	DB6	9	27.0 (1.063)	23.0 ± 8.0 (0.906 ± 0.315)	10.0 (0.394)	9.0 (0.354)	44.0 (1.732)
	DB2/7	--	--	--	--	--	
GB*	DB5	10	10.0 (0.394)	12.9 ± 2.6 (0.508 ± 0.102)	3.0 (0.118)	1.4 (0.055)	20.0 (0.787)
	DB1/3	21	10.0 (0.394)	12.9 ± 2.6 (0.508 ± 0.102)	3.0 (0.118)	1.4 (0.055)	20.0 (0.787)
	DB6	21	10.0 (0.394)	12.9 ± 2.6 (0.508 ± 0.102)	3.0 (0.118)	2.1 (0.083)	20.0 (0.787)
	DB2	36	10.0 (0.394)	12.9 ± 2.6 (0.508 ± 0.102)	3.0 (0.118)	1.4 (0.055)	20.0 (0.787)
	DB7	42	10.0 (0.394)	12.9 ± 2.6 (0.508 ± 0.102)	3.0 (0.118)	2.1 (0.083)	20.0 (0.787)
GC*	DB5	7	13.0 (0.512)	14.5 ± 3.6 (0.571 ± 0.142)	4.0 (0.157)	1.8 (0.071)	24.0 (0.945)
	DB1/3	16	13.0 (0.512)	14.5 ± 3.6 (0.571 ± 0.142)	4.0 (0.157)	1.8 (0.071)	24.0 (0.945)
	DB6	16	13.0 (0.512)	14.5 ± 3.6 (0.571 ± 0.142)	4.0 (0.157)	2.4 (0.083)	24.0 (0.945)
	DB2	26	13.0 (0.512)	14.5 ± 3.6 (0.571 ± 0.142)	4.0 (0.157)	1.8 (0.071)	24.0 (0.945)
	DB7	30	13.0 (0.512)	14.5 ± 3.6 (0.571 ± 0.142)	4.0 (0.157)	2.4 (0.083)	24.0 (0.945)
HB*	DB5	11	9.0 (0.354)	13.5 ± 2.5 (0.531 ± 0.098)	2.5 (0.098)	1.4 (0.055)	20.0 (0.787)
	DB1/3	23	9.0 (0.354)	13.5 ± 2.5 (0.531 ± 0.098)	2.5 (0.098)	1.4 (0.055)	20.0 (0.787)
	DB6	23	9.0 (0.354)	13.5 ± 2.5 (0.531 ± 0.098)	2.5 (0.098)	2.1 (0.083)	20.0 (0.787)
	DB2	29	9.0 (0.354)	13.5 ± 2.5 (0.531 ± 0.098)	2.5 (0.098)	1.4 (0.055)	20.0 (0.787)
	DB7	45	9.0 (0.354)	13.5 ± 2.5 (0.531 ± 0.098)	2.5 (0.098)	2.1 (0.083)	20.0 (0.787)
OB*	DB5	11	9.0 (0.354)	17.6 ± 2.5 (0.693 ± 0.098)	2.0 (0.079)	1.4 (0.055)	23.0 (0.906)
	DB1/3	23	9.0 (0.354)	17.6 ± 2.5 (0.693 ± 0.098)	2.0 (0.079)	1.4 (0.055)	23.0 (0.906)
	DB6	23	9.0 (0.354)	17.6 ± 2.5 (0.693 ± 0.098)	2.0 (0.079)	2.1 (0.083)	23.0 (0.906)
	DB2	29	9.0 (0.354)	17.6 ± 2.5 (0.693 ± 0.098)	2.0 (0.079)	1.4 (0.055)	23.0 (0.906)
	DB7	45	9.0 (0.354)	17.6 ± 2.5 (0.693 ± 0.098)	2.0 (0.079)	2.1 (0.083)	23.0 (0.906)

* For 85 °C only; plastic

ZF Electronics Systems Pleasant Prairie, LLC ("ZF") acquired the rights to the CHERRY branded switches and sensors in 2008.

Although ZF divested its interest in the CHERRY name in 2015, the switches and sensors remain unchanged and are now sold under the ZF brand.

