Actuator Specifications

Actuator Code	Contact Code	Maximum Operating Force grahms		Minimum Reset Force grahms		Maximum Pre-Travel	Operating Point	Minimum Over-Travel	Max. Movement Differential	Max. Rest Position	Actuation Length
		Standard	Light	Standard	Light	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)
AA	0, 1, 2, 3	170	45	45	13	1.2 (0.047)	14.7 ± 0.5 (0.559)	1.3 (0.051)	0.3 (0.012)	16.2 (0.638)	--
	4	285	75	100	22	1.2 (0.047)	14.7 ± 0.5 (0.559)	1.3 (0.051)	0.3 (0.012)	16.2 (0.638)	--
	5	400	100	140	30	1.2 (0.047)	14.7 ± 0.5 (0.559)	1.3 (0.051)	0.3 (0.012)	16.2 (0.638)	--
	8	--	150	--	60	1.6 (0.063)	14.7 ± 0.5 (0.559)	1.2 (0.047)	0.3 (0.012)	16.2 (0.638)	--
JA	0, 1, 2, 3	190	50	45	13	1.2 (0.047)	15.2 ± 0.5 (0.598)	0.9 (0.035)	0.3 (0.012)	16.8 (0.661)	21.2 (0.835)
	4	320	85	100	22	1.2 (0.047)	15.2 ± 0.5 (0.598)	0.9 (0.035)	0.3 (0.012)	16.8 (0.661)	21.2 (0.835)
	5	440	115	140	30	1.2 (0.047)	15.2 ± 0.5 (0.598)	0.9 (0.035)	0.3 (0.012)	16.8 (0.661)	21.2 (0.835)
	8	--	180	--	55	1.6 (0.063)	15.2 ± 0.5 (0.598)	0.8 (0.031)	0.3 (0.012)	16.8 (0.661)	21.2 (0.835)
JD	0, 1, 2, 3	86	22	20	5	3.2 (0.126)	15.2 ± 1.2 (0.598)	2.3 (0.091)	0.8 (0.031)	19.8 (0.780)	35.6 (1.40)
	4	144	40	40	8	3.2 (0.126)	15.2 ± 1.2 (0.598)	2.3 (0.091)	0.8 (0.031)	19.8 (0.780)	35.6 (1.40)
	5	200	50	60	12	3.2 (0.126)	15.2 ± 1.2 (0.598)	2.3 (0.091)	0.8 (0.031)	19.8 (0.780)	35.6 (1.40)
	8	--	75	--	22	3.8 (0.150)	15.2 ± 1.2 (0.598)	1.8 (0.071)	0.8 (0.031)	19.8 (0.780)	35.6 (1.40)
JL	0, 1, 2, 3	40	10	8	2	7.6 (0.290)	15.2 ± 3.2 (0.598)	4.7 (0.185)	1.7 (0.067)	25.2 (0.992)	69.9 (2.75)
	4	60	17	17	3.5	7.6 (0.290)	15.2 ± 3.2 (0.598)	4.7 (0.185)	1.7 (0.067)	25.2 (0.992)	69.9 (2.75)
	5	90	22	25	5	7.6 (0.290)	15.2 ± 3.2 (0.598)	4.7 (0.185)	1.7 (0.067)	25.2 (0.992)	69.9 (2.75)
	8	--	35	--	10	8.8 (0.346)	15.2 ± 3.2 (0.598)	4.3 (0.169)	1.7 (0.067)	25.2 (0.992)	69.9 (2.75)
KA	0, 1, 2, 3	110	28	25	7	2.2 (0.87)	15.2 ± 0.8 (0.598)	1.6 (0.630)	0.6 (0.024)	18.8 (0.740)	25.7 (1.01)
	4	180	50	55	10	2.2 (0.87)	15.2 ± 0.8 (0.598)	1.6 (0.630)	0.6 (0.024)	18.8 (0.740)	25.7 (1.01)
	5	256	65	75	16	2.2 (0.87)	15.2 ± 0.8 (0.598)	1.6 (0.630)	0.6 (0.024)	18.8 (0.740)	25.7 (1.01)
	8	--	100	--	30	3.0 (0.118)	15.2 ± 0.8 (0.598)	1.4 (0.055)	0.6 (0.024)	18.8 (0.740)	25.7 (1.01)
KD	0, 1, 2,3	50	14	11	3	5.1 (0.200)	15.2 ± 1.6 (0.598)	3.6 (0.142)	1.3 (0.051)	22.2 (0.874)	40.1 (1.58)
	4	86	25	25	6	5.1 (0.200)	15.2 ± 1.6 (0.598)	3.6 (0.142)	1.3 (0.051)	22.2 (0.874)	40.1 (1.58)
	5	120	30	35	7	5.1 (0.200)	15.2 ± 1.6 (0.598)	3.6 (0.142)	1.3 (0.051)	22.2 (0.874)	40.1 (1.58)
	8	--	45	--	13	6.4 (0.252)	15.2 ± 1.6 (0.598)	3.2 (0.126)	1.3 (0.051)	22.2 (0.874)	40.1 (1.58)
KL	0, 1, 2, 3	25	6	5	1.5	12.7 (0.500)	15.2 ± 4.2 (0.598)	7.9 (0.311)	2.5 (0.098)	30.8 (1.210)	74.4 (2.93)
	4	40	10	10	2	12.7 (0.500)	15.2 ± 4.2 (0.598)	7.9 (0.311)	2.5 (0.098)	30.8 (1.210)	74.4 (2.93)
	5	56	13	15	3	12.7 (0.500)	15.2 ± 4.2 (0.598)	7.9 (0.311)	2.5 (0.098)	30.8 (1.210)	74.4 (2.93)
	8	--	20	--	6	14.6 (0.575)	15.2 ± 4.2 (0.598)	7.2 (0.283)	2.5 (0.098)	30.8 (1.210)	74.4 (2.93)
LA	0, 1, 2, 3	190	50	45	13	1.2 (0.047)	15.2 ± 0.5 (0.598)	0.9 (0.035)	0.3 (0.012)	16.8 (0.661)	21.2 (0.835)
	4	320	85	100	22	1.2 (0.047)	15.2 ± 0.5 (0.598)	0.9 (0.035)	0.3 (0.012)	16.8 (0.661)	21.2 (0.835)
	5	440	115	140	30	1.2 (0.047)	15.2 ± 0.5 (0.598)	0.9 (0.035)	0.3 (0.012)	16.8 (0.661)	21.2 (0.835)
	8	--	180	--	55	1.6 (0.063)	15.2 ± 0.5 (0.598)	0.8 (0.031)	0.3 (0.012)	16.8 (0.661)	21.2 (0.835)
LD	0, 1, 2, 3	86	22	20	5	3.2 (0.126)	15.2 ± 1.2 (0.598)	2.3 (0.091)	0.8 (0.031)	19.8 (0.780)	35.6 (1.40)
	4	144	40	40	8	3.2 (0.126)	15.2 ± 1.2 (0.598)	2.3 (0.091)	0.8 (0.031)	19.8 (0.780)	35.6 (1.40)
	5	200	50	60	12	3.2 (0.126)	15.2 ± 1.2 (0.598)	2.3 (0.091)	0.8 (0.031)	19.8 (0.780)	35.6 (1.40)
	8	--	75	--	22	3.8 (0.150)	15.2 ± 1.2 (0.598)	1.8 (0.071)	0.8 (0.031)	19.8 (0.780)	35.6 (1.40)
LL	0, 1, 2, 3	40	10	8	2	7.6 (0.290)	15.2 ± 3.2 (0.598)	4.7 (0.185)	1.7 (0.067)	25.2 (0.992)	69.9 (2.75)
	4	60	17	17	3.5	7.6 (0.290)	15.2 ± 3.2 (0.598)	4.7 (0.185)	1.7 (0.067)	25.2 (0.992)	69.9 (2.75)
	5	90	22	25	5	7.6 (0.290)	15.2 ± 3.2 (0.598)	4.7 (0.185)	1.7 (0.067)	25.2 (0.992)	69.9 (2.75)
	8	--	35	--	10	8.8 (0.346)	15.2 ± 3.2 (0.598)	4.3 (0.169)	1.7 (0.067)	25.2 (0.992)	69.9 (2.75)

J, K actuators are stainless steel, others cold-rolled steel, nickel-plated

See D4 data sheet for more information

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

Actuator Code	Contact Code	Maximum Operating Force grahms		Minimum Reset Force grahms		Maximum Pre-Travel	Operating Point	Minimum Over-Travel	Max. Movement Differential	Max. Rest Position	Actuation Length
		Standard	Light	Standard	Light	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)	mm (in)
MA	0, 1, 2, 3	110	28	25	7	2.2 (0.87)	15.2 ± 0.8 (0.598)	1.6 (0.630)	0.6 (0.024)	18.8 (0.740)	25.7 (1.01)
	4	180	50	55	10	2.2 (0.87)	15.2 ± 0.8 (0.598)	1.6 (0.630)	0.6 (0.024)	18.8 (0.740)	25.7 (1.01)
	5	256	65	75	16	2.2 (0.87)	15.2 ± 0.8 (0.598)	1.6 (0.630)	0.6 (0.024)	18.8 (0.740)	25.7 (1.01)
	8	--	100	--	30	3.0 (0.118)	15.2 ± 0.8 (0.598)	1.4 (0.055)	0.6 (0.024)	18.8 (0.740)	25.7 (1.01)
MD	0, 1, 2, 3	50	14	11	3	5.1 (0.200)	15.2 ± 1.6 (0.598)	3.6 (0.142)	1.3 (0.051)	22.2 (0.874)	40.1 (1.58)
	4	86	25	25	6	5.1 (0.200)	15.2 ± 1.6 (0.598)	3.6 (0.142)	1.3 (0.051)	22.2 (0.874)	40.1 (1.58)
	5	120	30	35	7	5.1 (0.200)	15.2 ± 1.6 (0.598)	3.6 (0.142)	1.3 (0.051)	22.2 (0.874)	40.1 (1.58)
	8	--	45	--	13	6.4 (0.252)	15.2 ± 1.6 (0.598)	3.2 (0.126)	1.3 (0.051)	22.2 (0.874)	40.1 (1.58)
ML	0, 1, 2, 3	25	6	5	1.5	12.7 (0.500)	15.2 ± 4.2 (0.598)	7.9 (0.311)	2.5 (0.098)	30.8 (1.210)	74.4 (2.93)
	4	40	10	10	2	12.7 (0.500)	15.2 ± 4.2 (0.598)	7.9 (0.311)	2.5 (0.098)	30.8 (1.210)	74.4 (2.93)
	5	56	13	15	3	12.7 (0.500)	15.2 ± 4.2 (0.598)	7.9 (0.311)	2.5 (0.098)	30.8 (1.210)	74.4 (2.93)
	8	--	20	--	6	14.6 (0.575)	15.2 ± 4.2 (0.598)	7.2 (0.283)	2.5 (0.098)	30.8 (1.210)	74.4 (2.93)
RA	0, 1, 2	90	15			1.2 (0.047)	19.7 (0.776)	1.0 (0.039)	0.4 (0.016)	21.8 (0.858)	20.6 (0.811)
	3	190	45			1.2 (0.047)	19.7 (0.776)	1.0 (0.039)	0.4 (0.016)	21.8 (0.858)	20.6 (0.811)
	4	330	75	Contact Factory		1.2 (0.047)	19.7 (0.776)	1.0 (0.039)	0.4 (0.016)	21.8 (0.858)	20.6 (0.811)
	5	440	100			1.2 (0.047)	19.7 (0.776)	1.0 (0.039)	0.4 (0.016)	21.8 (0.858)	20.6 (0.811)
	8	--	180			1.7 (0.067)	21.3 (0.839)	0.8 (0.031)	0.3 (0.012)	22.0 (0.866)	20.6 (0.811)
RD	0, 1, 2	40	8			3.2 (0.126)	19.4 (0.764)	2.2 (0.087)	0.8 (0.031)	24.8 (0.976)	34.1 (1.34)
	3	86	22			3.2 (0.126)	19.4 (0.764)	2.2 (0.087)	0.8 (0.031)	24.8 (0.976)	34.1 (1.34)
	4	144	40	Contact Factory		3.2 (0.126)	19.4 (0.764)	2.2 (0.087)	0.8 (0.031)	24.8 (0.976)	34.1 (1.34)
	5	200	50			3.2 (0.126)	19.4 (0.764)	2.2 (0.087)	0.8 (0.031)	24.8 (0.976)	34.1 (1.34)
	8	--	75			3.8 (0.150)	21.6 (0.850)	1.8 (0.071)	0.8 (0.031)	24.8 (0.976)	34.1 (1.34)
SA	0, 1, 2	85	17			1.3 (0.051)	19.8 (0.780)	1.0 (0.039)	0.3 (0.012)	21.8 (0.858)	20.6 (0.811)
	3	190	50			1.3 (0.051)	19.8 (0.780)	1.0 (0.039)	0.3 (0.012)	21.8 (0.858)	20.6 (0.811)
	4	330	85	Contact Factory		1.3 (0.051)	19.8 (0.780)	1.0 (0.039)	0.3 (0.012)	21.8 (0.858)	20.6 (0.811)
	5	440	115			1.3 (0.051)	19.8 (0.780)	1.0 (0.039)	0.3 (0.012)	21.8 (0.858)	20.6 (0.811)
	8	--	200			1.7 (0.067)	21.2 (0.835)	0.8 (0.031)	0.3 (0.012)	22.0 (0.866)	20.6 (0.811)
TA	0, 1, 2	55	10			2.2 (0.087)	19.4 (0.764)	1.6 (0.063)	0.6 (0.024)	23.8 (0.937)	25.1 (0.988)
	3	110	30			2.2 (0.087)	19.4 (0.764)	1.6 (0.063)	0.6 (0.024)	23.8 (0.937)	25.1 (0.988)
	4	200	55	Contact Factory		2.2 (0.087)	19.4 (0.764)	1.6 (0.063)	0.6 (0.024)	23.8 (0.937)	25.1 (0.988)
	5	260	70			2.2 (0.087)	19.4 (0.764)	1.6 (0.063)	0.6 (0.024)	23.8 (0.937)	25.1 (0.988)
	8	--	110			3.0 (0.118)	21.6 (0.850)	1.3 (0.051)	0.6 (0.024)	24.0 (0.945)	25.1 (0.988)
TD	0, 1, 2	25	14			5.1 (0.200)	18.9 (0.744)	3.6 (0.142)	1.3 (0.051)	27.4 (1.080)	38.6 (1.52)
	3	55	14			5.1 (0.200)	18.9 (0.744)	3.6 (0.142)	1.3 (0.051)	27.4 (1.080)	38.6 (1.52)
	4	86	22	Contact Factory		5.1 (0.200)	18.9 (0.744)	3.6 (0.142)	1.3 (0.051)	27.4 (1.080)	38.6 (1.52)
	5	120	30			5.1 (0.200)	18.9 (0.744)	3.6 (0.142)	1.3 (0.051)	27.4 (1.080)	38.6 (1.52)
	8	--	50			6.2 (0.244)	22.1 (0.870)	3.0 (0.118)	1.2 (0.047)	27.4 (1.080)	38.6 (1.52)
UA	0, 1, 2	55	11			2.2 (0.087)	19.5 (0.768)	1.6 (0.063)	0.5 (0.020)	23.8 (0.937)	25.1 (0.988)
	3	120	32			2.2 (0.087)	19.5 (0.768)	1.6 (0.063)	0.5 (0.020)	23.8 (0.937)	25.1 (0.988)
	4	215	55	Contact Factory		2.2 (0.087)	19.5 (0.768)	1.6 (0.063)	0.5 (0.020)	23.8 (0.937)	25.1 (0.988)
	5	280	70			2.2 (0.087)	19.5 (0.768)	1.6 (0.063)	0.5 (0.020)	23.8 (0.937)	25.1 (0.988)
	8	--	110			3.0 (0.118)	21.5 (0.846)	1.3 (0.051)	0.5 (0.020)	24.0 (0.945)	25.1 (0.988)

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