

# Direct Coupled Actuators

Belimo														
Belimo Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)
CMB24-3	NSR	18 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	35	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac	—	—	90
CMB120-3	NSR	18 lb-in	On/Off, Floating	100-240 Vac	—	—	35	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac	—	—	90
CMB24-SR-R	NSR	18 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	35	ML7161A2008	35 lb-in	On/Off, Floating	24 Vac	—	—	90
CMB24-SR-L	NSR	18 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	35	ML7161A2008	35 lb-in	On/Off, Floating	24 Vac	—	—	90
LMB24-3-P5-T	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	0-5 kOhm	—	95	ML6174A2002 + 200976A	70 lb-in	On/Off, Floating	24 Vac	500 kOhm	—	90
LMB24-3-P10-T	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	0-10 kOhm	—	95	ML6174A2002 + 200976C	70 lb-in	On/Off, Floating	24 Vac	2 kOhm	—	90
								ML6174A2002 + 200976A	70 lb-in	On/Off, Floating	24 Vac	500 kOhm	—	90
								ML6174A2002 + 200976C	70 lb-in	On/Off, Floating	24 Vac	2 kOhm	—	90
LMB24-3	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
LMB24-3-T	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
LMB24-3-S	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	—	1	95	MN6105A1201	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
LMB24-SR	NSR	45 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMX24-SR	NSR	45 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMB24-SR-T	NSR	45 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	—	—	95	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMX24-SR-T	NSR	45 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	—	—	95	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMB24-MFT	NSR	45 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMX24-MFT	NSR	45 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMX24-MFT	NSR	45 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	Add-On	150	MN7505A2209	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
LMCB24-3	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	35	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
LMCB24-3-T	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	35	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
LMX24-3	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
LMX24-3-T	NSR	45 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
LMCB24-SR	NSR	45 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	35	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMCB24-SR-T	NSR	45 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	—	—	35	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMX120-SR	NSR	45 lb-in	2-10 Vdc (4-20 mA)	100-240 Vac	2-10 Vdc	—	95	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LMX120-3	NSR	45 lb-in	On/Off, Floating	100-240 Vac	—	—	150	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
LMQX24-MFT	NSR	35 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	ML6161A2009	35 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac	—	—	90
NMB24-3	NSR	90 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
NMCB24-3	NSR	90 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	45	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
NMX24-3	NSR	90 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
NMX24-3-T	NSR	90 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
NMX120-3	NSR	90 lb-in	On/Off, Floating	100-240 Vac	—	—	150	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
NMX120-SR	NSR	90 lb-in	2-10 Vdc (4-20 mA)	100-240 Vac	2-10 Vdc	—	150	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NMCX24-MFT	NSR	90 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NMQX24-MFT	NSR	70 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	ML7174A2001	70 lb-in	(0) 2-10 Vdc	24 Vac/Vdc	—	—	90
NMB24-SR	NSR	90 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	—	—	95	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NMCB24-SR	NSR	90 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	45	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NMX24-SR	NSR	90 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NMX24-SR-T	NSR	90 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	—	—	95	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NMB24-MFT	NSR	90 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NMX24-MFT	NSR	90 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AMB24-3	NSR	180 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
AMX24-3	NSR	180 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
AMX24-3-T	NSR	180 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	95	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
AMB24-3-S	NSR	180 lb-in	On/Off, Floating	24 Vac/Vdc	—	1	95	MN6120A1200	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
AMB24-SR	NSR	180 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MN7220A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AMX24-SR	NSR	180 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MN7220A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AMX24-SR-T	NSR	180 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	—	—	95	MN7220A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AMB24-MFT	NSR	180 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7220A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AMX24-MFT	NSR	180 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7220A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AMX120-3	NSR	180 lb-in	On/Off, Floating	100-240 Vac	—	—	95	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
AMX120-SR	NSR	180 lb-in	2-10 Vdc (4-20 mA)	100-240 Vac	2-10 Vdc	—	95	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AMQX24-MFT	NSR	140 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7220A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMB24-3	NSR	360 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	150	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GMX24-3	NSR	360 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	150	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GMB24-SR	NSR	360 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	150	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMX24-SR	NSR	360 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	150	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMB24-MFT	NSR	360 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	150	MN6134A2008	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GMX24-MFT	NSR	360 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMX120-3	NSR	360 lb-in	On/Off, Floating	100-240 Vac	—	—	150	MN6134A2008	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
TFB24	SR	22 lb-in	On/Off	24 Vac/Vdc	—	—	75	MS8103A1030	27 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
TFB24-S	SR	22 lb-in	On/Off	24 Vac/Vdc	—	1	75	MS8103A1130	27 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	1	45

# Direct Coupled Actuators

Belimo (cont.)														
Belimo Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)
TFLB24	SR	22 lb-in	On/Off	24 Vac/Vdc	—	—	75	MS8103A1030	27 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
TFB120	SR	22 lb-in	On/Off	100-240 Vac	—	—	75	MS4103A1030	27 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
TFB120-S	SR	22 lb-in	On/Off	100-240 Vac	—	1	75	MS4103A1130	27 lb-in	Two-Position (SPST)	100-250 Vac	—	1	45
TFLB120	SR	22 lb-in	On/Off	100-240 Vac	—	—	75	MS4103A1030	27 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
TFCB120-S	SR	22 lb-in	On/Off	100-240 Vac	—	1	30	MS4103A1130	27 lb-in	Two-Position (SPST)	100-250 Vac	—	1	45
TFB24-SR	SR	22 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	—	—	95	MS7503A2030	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
TFB24-SR-S	SR	22 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	—	1	95	MS7503A2130	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
TFB120-SR	SR	22 lb-in	2-10 Vdc (4-20 mA)	100-240 Vac	2-10 Vdc	—	95	MS4103A1030	27 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
TFB24-3	SR	22 lb-in	Floating	24 Vac/Vdc	—	—	95	MS7503A2030	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
TFB24-3-S	SR	22 lb-in	Floating	24 Vac/Vdc	—	1	95	MS7503A2130	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
TFB24-MFT	SR	22 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	95	MS7503A2030	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
TFB24-MFT-S	SR	22 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	1	95	MS7503A2130	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
TFX24	SR	22 lb-in	On/Off	24 Vac/Vdc	—	—	<75	MS8105W1030	44 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
TFX24-S	SR	22 lb-in	On/Off	24 Vac/Vdc	—	1	<75	MS8105W1130	44 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	1	45
TFX24-SR	SR	22 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MS7505W2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
TFX24-SR-S	SR	22 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	1	95	MS7505W2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
TFX24-3	SR	22 lb-in	Floating	24 Vac/Vdc	—	—	95	MS7505W2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
TFX24-3-S	SR	22 lb-in	Floating	24 Vac/Vdc	—	1	95	MS7505W2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
TFX24-MFT	SR	22 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MS7505W2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
TFX24-MFT-S	SR	22 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	1	150	MS7505W2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
LF24-S US	SR	35 lb-in	On/Off	24 Vac/Vdc	—	1	40-75	MS8105A1130	44 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	1	45
LF120 US	SR	35 lb-in	On/Off	120 Vac	—	—	40-75	MS4105A1030	44 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
LF120-S US	SR	35 lb-in	On/Off	120 Vac	—	1	40-75	MS4105A1130	44 lb-in	Two-Position (SPST)	100-250 Vac	—	1	45
LF230 US	SR	35 lb-in	On/Off	230 Vac	—	—	40-75	MS4105A1030	44 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
LF230-S US	SR	35 lb-in	On/Off	230 Vac	—	1	40-75	MS4105A1130	44 lb-in	Two-Position (SPST)	100-250 Vac	—	1	45
LF24-3 US	SR	35 lb-in	Modulating	24 Vac/Vdc	—	—	150	MS7505A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LF24-3-S US	SR	35 lb-in	Modulating	24 Vac/Vdc	—	1	150	MS7505A2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
LFC24-3-R US	SR	35 lb-in	Floating	24 Vac/Vdc	—	—	90	MS7505A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LFC24-3-S US	SR	35 lb-in	Floating	24 Vac/Vdc	—	1	90	MS7505A2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
LF24-SR US	SR	35 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	150	MS7505A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LF24-SR-S US	SR	35 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	1	150	MS7505A2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
LF24-SR-E US	SR	35 lb-in	2-10 Vdc, Built-in minimum position	24 Vac/Vdc	2-10 Vdc	—	150	MS7405A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc, Economizer (3 kOhm, 3-Position)	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LF24-MFT US	SR	35 lb-in	MFT	24 Vac/Vdc	2-10 Vdc	—	150	MS7505A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
LF24-MFT-S US	SR	35 lb-in	MFT	24 Vac/Vdc	2-10 Vdc	1	150	MS7505A2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
LF24-MFT-20 US	SR	35 lb-in	MFT	24 Vac/Vdc	2-10 Vdc	—	150	MS7505A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NFB24	SR	90 lb-in	On/Off	24 Vac/Vdc	—	—	<75	MS8110A1008	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
NFB24-S	SR	90 lb-in	On/Off	24 Vac/Vdc	—	2	<75	MS8110A1206	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
NFBUP	SR	90 lb-in	On/Off	24-240Vac	—	—	<75	MS41101002	88 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
NFBUP-S	SR	90 lb-in	On/Off	24-240Vac	—	2	<75	MS4110A1200	88 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
NFB24-SR	SR	90 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NFB24-SR-S	SR	90 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	2	95	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
NFB24-MFT	SR	90 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NFB24-MFT-S	SR	90 lb-in	0-135 kOhm	24 Vac/Vdc	Variable (0-10 Vdc)	2	150	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
NFX24	SR	90 lb-in	On/Off	24 Vac/Vdc	—	—	<75	MS8110W1008	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
NFX24-S	SR	90 lb-in	On/Off	24 Vac/Vdc	—	2	<75	MS8110W1206	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
NFX24-SR	SR	90 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MS7510W2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
NFX24-SR-S	SR	90 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	2	95	MS7510W2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
NFX24-MFT	SR	90 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MS7510W2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90

# Direct Coupled Actuators

## Belimo (cont.)

Belimo Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)
NFX24-MFT-S	SR	90 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	2	150	MS7510W2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
AF24 US	SR	133 lb-in	On/Off	24 Vac/Vdc	—	—	150	MS8120A1007	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
AF24-S US	SR	133 lb-in	On/Off	24 Vac/Vdc	—	2	150	MS8120A1205	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
AF120 US	SR	133 lb-in	On/Off	120 Vac	—	—	150	MS4120A1001	175 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
AF120-S US	SR	133 lb-in	On/Off	120 Vac	—	2	150	MS4120A1209	175 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
AF230 US	SR	133 lb-in	On/Off	230 Vac	—	—	150	MS4120A1001	175 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
AF230-S US	SR	133 lb-in	On/Off	230 Vac	—	2	150	MS4120A1209	175 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
AF24-SR US	SR	133 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	150	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AF24-MFT US	SR	133 lb-in	MFT	24 Vac/Vdc	2-10 Vdc	—	150	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AF24-MFT-S US	SR	133 lb-in	MFT	24 Vac/Vdc	2-10 Vdc	2	150	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
AF24-MFT-S US	SR	133 lb-in	MFT	24 Vac/Vdc	2-10 Vdc	2	150	MS7520H2208	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
AF24-MFT95 US	SR	133 lb-in	0-135 kOhm	24 Vac/Vdc	—	—	150	MS7520A2007 + Q7002B1009	175 lb-in	0-135 kOhm	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AFB24	SR	180 lb-in	On/Off	24 Vac/Vdc	—	—	<75	MS8120A1007	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
AFB24-S	SR	180 lb-in	On/Off	24 Vac/Vdc	—	2	<75	MS8120A1205	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
AFBUP	SR	180 lb-in	On/Off	24-240Vac	—	—	<75	MS4120A1001	175 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
AFBUP-S	SR	180 lb-in	On/Off	24-240Vac	—	2	<75	MS4120A1209	175 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
AFB24-SR	SR	180 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AFB24-SR-S	SR	180 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	2	95	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
AFB24-MFT	SR	180 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AFB24-MFT-S	SR	180 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	2	150	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
AFB24-MFT95	SR	180 lb-in	0-135 kOhm	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MS7520A2007 + Q7002B1009	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AFX24	SR	180 lb-in	On/Off	24 Vac/Vdc	—	—	<75	MS8120W1007	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
AFX24-S	SR	180 lb-in	On/Off	24 Vac/Vdc	—	2	<75	MS8120W1205	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
AFX24-SR	SR	180 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	—	95	MS7520W2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AFX24-SR-S	SR	180 lb-in	2-10 Vdc (4-20 mA)	24 Vac/Vdc	2-10 Vdc	2	95	MS7520W2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
AFX24MFT	SR	180 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MS7520W2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
AFX24-MFT-S	SR	180 lb-in	MFT	24 Vac/Vdc	Variable (0-10 Vdc)	2	150	MS7520W2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
AFX24-MFT95	SR	180 lb-in	0-135 kOhm	24 Vac/Vdc	Variable (0-10 Vdc)	—	150	MS7520W2007 + Q7002B1009	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90

Belimo Notes: All models described as (0) 2-10 Vdc can be used with a 4-20 mA control input. Shunt a 500 kOhm, 1/2 W resistor across the input at the actuator.

## Johnson

Johnson Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)
M9102-AGA-2S	NSR	18 lb-in	Floating	18 to 30 Vac at 50/60 Hz	—	—	30	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9102-AGA-3S	NSR	18 lb-in	Floating	18 to 30 Vac at 50/60 Hz	—	—	30	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9102-IGA-2S	NSR	18 lb-in	On/Off, Floating	18 to 30 Vac at 50/60 Hz	—	—	30	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9102-IGA-3S	NSR	18 lb-in	On/Off, Floating	18 to 30 Vac at 50/60 Hz	—	—	30	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9104-AGA-2S	NSR	35 lb-in	Floating	18 to 30 Vac at 50/60 Hz	—	—	60	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9104-AGA-3S	NSR	35 lb-in	Floating	18 to 30 Vac at 50/60 Hz	—	—	60	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9104-IGA-2S	NSR	35 lb-in	On/Off, Floating	18 to 30 Vac at 50/60 Hz	—	—	60	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9104-IGA-3S	NSR	35 lb-in	On/Off, Floating	18 to 30 Vac at 50/60 Hz	—	—	60	ML6161A2009	35 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9104-GGA-2S	NSR	35 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	18 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	60	ML7161A2008 + 200976C	35 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	0-2 kOhm	—	90
M9104-GGA-3S	NSR	35 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	18 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	60	ML7161A2008 + 200976C	35 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	0-2 kOhm	—	90
M9104-AGA-2N	NSR	35 lb-in	Floating	20 to 30 Vac at 50/60 Hz	—	—	90/108 (at 60/50 Hz)	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9104-AGS-2N	NSR	35 lb-in	Floating	20 to 30 Vac at 50/60 Hz	—	—	90/108 (at 60/50 Hz)	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9106-IGA-2	NSR	53 lb-in & 35 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	Selectable: 60, 90, 120, 330, or 660 (at 60 Hz), 72, 108, 144, 396, or 792 (at 50 Hz).	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9106-IGC-2	NSR	53 lb-in & 35 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	2	Selectable: 60, 90, 120, 330, or 660 (at 60 Hz), 72, 108, 144, 396, or 792 (at 50 Hz).	MN6105A1201	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
M9106-AGA-2	NSR	53 lb-in	Floating	20 to 30 Vac at 50/60 Hz	—	—	60/72 (at 60/50 Hz)	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90

# Direct Coupled Actuators

Johnson (cont.)														
Johnson Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feed-back	Switches	Timing (sec)
M9106-AGA-2N01	NSR	53 lb-in	Floating	20 to 30 Vac at 50/60 Hz	—	—	60/72 (at 60/50 Hz)	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9106-AGA-2N02	NSR	53 lb-in	Floating	20 to 30 Vac at 50/60 Hz	—	—	120/144 (at 60/50 Hz)	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9106-AGC-2	NSR	53 lb-in	Floating	20 to 30 Vac at 50/60 Hz	—	2	60/72 (at 60/50 Hz)	MN6110A1201	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
M9106-AGF-2	NSR	53 lb-in	Floating	20 to 30 Vac at 50/60 Hz	0-10 kOhm	—	60/72 (at 60/50 Hz)	ML6174B2019 + 200976C	70 lb-in	On/Off, Floating	24 Vac	0-2 kOhm	—	90
M9106-GGA-2	NSR	53 lb-in	(0) 2-10 Vdc, (0) 4 to 20 mA	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	—	60/72 (at 60/50 Hz)	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9106-GGC-2	NSR	53 lb-in	(0) 2-10 Vdc, (0) 4 to 20 mA	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	2	60/72 (at 60/50 Hz)	MN7510A2209	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9108-AGA-2	NSR	70 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	25-50 for 0-70 lb-in, 30 at 50% load.	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9108-AGC-2	NSR	70 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	2	25-50 for 0-70 lb-in, 30 at 50% load.	MN6110A1201	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
M9108-AGD-2	NSR	70 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	0-135 kOhm	—	25-50 for 0-70 lb-in, 30 at 50% load.	ML6174B2019 + 200976A	70 lb-in	On/Off, Floating	24 Vac	0-500 kOhm	—	90
M9108-AGE-2	NSR	70 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	0-1 kOhm	—	25-50 for 0-70 lb-in, 30 at 50% load.	ML6174B2019 + 200976C	70 lb-in	On/Off, Floating	24 Vac	0-2 kOhm	—	90
M9108-GGA-2	NSR	70 lb-in	0-20 Vdc (selectable zero and span), (0) 4 to 20 mA, Reversible.	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	—	25-50 for 0-70 lb-in, 30 at 50% load.	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9108-GGC-2	NSR	70 lb-in	0-20 Vdc (selectable zero and span), (0) 4 to 20 mA, Reversible.	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	2	25-50 for 0-70 lb-in, 30 at 50% load.	MN7510A2209	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9108-HGA-2	NSR	70 lb-in	0-20 Vdc (adjustable zero and span), (0) 4 to 20 mA, Reversible.	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	—	25-50 for 0-70 lb-in, 30 at 50% load.	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9108-HGC-2	NSR	70 lb-in	0-20 Vdc (adjustable zero and span), (0) 4 to 20 mA, Reversible.	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	2	25-50 for 0-70 lb-in, 30 at 50% load.	MN7510A2209	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9109-AGA-2	NSR	80 lb-in	Floating	20 to 30 Vac at 50/60 Hz	—	—	60/72 (at 60/50 Hz)	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9109-AGC-2	NSR	80 lb-in	Floating	20 to 30 Vac at 50/60 Hz	—	2	60/72 (at 60/50 Hz)	MN6110A1201	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
M9109-GGA-2	NSR	80 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	—	60/72 (at 60/50 Hz)	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9109-GGC-2	NSR	80 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	2	60/72 (at 60/50 Hz)	MN7510A2209	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9116-AGA-2	NSR	140 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	70-115 for 0-140 lb-in, 80 at 50% load.	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9116-AGC-2	NSR	140 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	2	70-115 for 0-140 lb-in, 80 at 50% load.	MN6120A1200	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
M9116-AGD-2	NSR	140 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	0-135 kOhm	—	70-115 for 0-140 lb-in, 80 at 50% load.	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9116-AGE-2	NSR	140 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	0-1 kOhm	—	70-115 for 0-140 lb-in, 80 at 50% load.	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9116-GGA-2	NSR	140 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	—	70-115 for 0-140 lb-in, 80 at 50% load.	MN7220A2007	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9116-GGC-2	NSR	140 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	2	70-115 for 0-140 lb-in, 80 at 50% load.	MN7220A2205	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9116-HGA-2	NSR	140 lb-in & 280 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	—	70-115 for 0-140 lb-in, 80 at 50% load.	MN7220A2007	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9116-HGC-2	NSR	140 lb-in & 280 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	2	70-115 for 0-140 lb-in, 80 at 50% load.	MN7220A2205	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9124-AGA-2	NSR	210 lb-in & 420 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	115-175 for 0-210 lb-in, 130 at 50% load.	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9124-AGC-2	NSR	210 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	2	115-175 for 0-210 lb-in, 130 at 50% load.	MN6134A1003 + SW2-US	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
M9124-AGD-2	NSR	210 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	0-1 35 kOhm	—	115-175 for 0-210 lb-in, 130 at 50% load.	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9124-AGE-2	NSR	210 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	0-1 kOhm	—	115-175 for 0-210 lb-in, 130 at 50% load.	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9124-GGA-2	NSR	210 lb-in & 420 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	—	115-175 for 0-210 lb-in, 130 at 50% load.	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90

# Direct Coupled Actuators

Johnson (cont.)														
Johnson Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feed-back	Switches	Timing (sec)
M9124-GGC-2	NSR	210 lb-in & 420 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	2	115-175 for 0-210 lb-in, 130 at 50% load.	MN7234A2008 + SW2-US	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9124-HGA-2	NSR	210 lb-in & 420 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	—	115-175 for 0-210 lb-in, 130 at 50% load.	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9124-HGC-2	NSR	210 lb-in & 420 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span selection.	2	115-175 for 0-210 lb-in, 130 at 50% load.	MN7234A2008 + SW2-US	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9132-AGA-2	NSR	280 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	115-205 for 0-280 lb-in, 140 at 50% load.	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9132-AGC-2	NSR	280 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	2	115-205 for 0-280 lb-in, 140 at 50% load.	MN6134A1003 + SW2-US	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
M9132-AGE-2	NSR	280 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	0-1 kOhm	—	115-205 for 0-280 lb-in, 140 at 50% load.	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
M9132-GGA-2	NSR	280 lb-in & 560 lb-in	(0) 2-10 Vdc, (0) 4 to 20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span and stroke limits	—	115-205 for 0-280 lb-in, 140 at 50% load.	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9132-GGC-2	NSR	280 lb-in & 560 lb-in	(0) 2-10 Vdc, (0) 4 to 20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc for 90 (1 mA at 10 Vdc). Corresponds to span and stroke limits	2	115-205 for 0-280 lb-in, 140 at 50% load.	MN7234A2008 + SW2-US	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9203-AGA-2	SR	27 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	150	MS7503A2030	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9203-AGB-2	SR	27 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	1	150	MS7503A2130	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
M9203-AGA-2Z	SR	27 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	90	MS7503A2030	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9203-AGB-2Z	SR	27 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	1	90	MS7503A2130	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
M9203-BGA-2	SR	27 lb-in	On/Off	20 to 30 Vac at 50/60 Hz	—	—	< 75	MS8103A1030	27 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
M9203-BGB-2	SR	27 lb-in	On/Off	20 to 30 Vac at 50/60 Hz	—	1	< 75	MS8103A1130	27 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	1	45
M9203-BUA-2	SR	27 lb-in	On/Off	85 to 264 Vac at 50/60Hz	—	—	< 75	MS4103A1030	27 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
M9203-BUB-2	SR	27 lb-in	On/Off	85 to 264 Vac at 50/60Hz	—	1	< 75	MS4103A1130	27 lb-in	Two-Position (SPST)	100-250 Vac	—	1	45
M9203-GGA-2	SR	27 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	150	MS7503A2030	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9203-GGB-2	SR	27 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	1	150	MS7503A2130	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
M9203-GGA-2Z	SR	27 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	90	MS7503A2030	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9203-GGB-2Z	SR	27 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	1	90	MS7503A2130	27 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
M9208-AGA-2	SR	70 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	150	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9208-AGA-3	SR	70 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	150	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9208-AGC-3	SR	70 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	2	150	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9208-BGA-3	SR	70 lb-in	On/Off	18 to 30 Vac at 50/60 Hz	—	—	< 75	MS8110A1008	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
M9208-BGC-3	SR	70 lb-in	On/Off	18 to 30 Vac at 50/60 Hz	—	2	< 75	MS8110A1206	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
M9208-BAA-3	SR	70 lb-in	On/Off	102 to 132 Vac at 50/60 Hz	—	—	< 75	MS4110A1002	88 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
M9208-BAC-3	SR	70 lb-in	On/Off	102 to 132 Vac at 50/60 Hz	—	2	< 75	MS4110A1200	88 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
M9208-BDA-3	SR	70 lb-in	On/Off	198 to 264 Vac at 50/60 Hz	—	—	< 75	MS4110A1002	88 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
M9208-BDC-3	SR	70 lb-in	On/Off	198 to 264 Vac at 50/60 Hz	—	2	< 75	MS4110A1200	88 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
M9208-GGA-2	SR	70 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	150	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9208-GGA-3	SR	70 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	150	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9208-GGC-3	SR	70 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	2	150	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9210-AGA-3	SR	89 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	150	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9210-AGC-3	SR	89 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	2	150	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9210-BGA-3	SR	89 lb-in	On/Off	20 to 30 Vac at 50/60 Hz	—	—	24 to 57	MS8110A1008	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45

## Direct Coupled Actuators

Johnson (cont.)														
Johnson Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feed-back	Switches	Timing (sec)
M9210-BGC-3	SR	89 lb-in	On/Off	20 to 30 Vac at 50/60 Hz	—	2	24 to 57	MS8110A1206	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
M9210-BAA-3	SR	89 lb-in	On/Off	102 to 132 Vac at 50/60 Hz	—	—	24 to 57	MS4110A1002	88 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
M9210-BAC-3	SR	89 lb-in	On/Off	102 to 132 Vac at 50/60 Hz	—	2	24 to 57	MS4110A1200	88 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
M9210-BDA-3	SR	89 lb-in	On/Off	198 to 264 Vac at 50/60 Hz	—	—	24 to 57	MS4110A1002	88 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
M9210-BDC-3	SR	89 lb-in	On/Off	198 to 264 Vac at 50/60 Hz	—	2	24 to 57	MS4110A1200	88 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
M9210-GGA-3	SR	89 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	150	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9210-GGC-3	SR	89 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	2	150	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9210-HGA-3	SR	89 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	150	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9210-HGC-3	SR	89 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	2	150	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9220-AGA-3	SR	177 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	—	150	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9220-AGC-3	SR	177 lb-in	On/Off, Floating	20 to 30 Vac at 50/60 Hz	—	2	150	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9220-BGA-3	SR	177 lb-in	On/Off	20 to 30 Vac at 50/60 Hz	—	—	24 to 57	MS8120A1007	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
M9220-BGC-3	SR	177 lb-in	On/Off	20 to 30 Vac at 50/60 Hz	—	2	24 to 57	MS8120A1205	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
M9220-BAA-3	SR	177 lb-in	On/Off	102 to 132 Vac at 50/60 Hz	—	—	24 to 57	MS4120A1001	175 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
M9220-BAC-3	SR	177 lb-in	On/Off	102 to 132 Vac at 50/60 Hz	—	2	24 to 57	MS4120A1209	175 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
M9220-BDA-3	SR	177 lb-in	On/Off	198 to 264 Vac at 50/60 Hz	—	—	24 to 57	MS4120A1001	175 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
M9220-BDC-3	SR	177 lb-in	On/Off	198 to 264 Vac at 50/60 Hz	—	2	24 to 57	MS4120A1209	175 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
M9220-GGA-3	SR	177 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	150	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9220-GGC-3	SR	177 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	2	150	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
M9220-HGA-3	SR	177 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	—	150	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
M9220-HGC-3	SR	177 lb-in	(0) 2-10 Vdc, (0) 4-20 mA, Reversible	20 to 30 Vac at 50/60 Hz	(0) 2-10 Vdc	2	150	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90

Johnson Notes: All models described as (0) 2-10 Vdc can be used with a 4-20 mA control input. Shunt a 500 kOhm, 1/2 W resistor across the input at the actuator.

Invensys														
Invensys Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)
MF41-6043	NSR	35 lb-in	Floating	24 Vac	—	—	< 90	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
MF41-6043-502	NSR	35 lb-in	Floating	24 Vac	—	2	< 90	MN6105A1201	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
MF41-6043-510	NSR	35 lb-in	Floating	24 Vac	0-1 kOhm	—	< 90	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF41-6083	NSR	70 lb-in	Floating	24 Vac	—	—	< 125	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
MF41-6083-502	NSR	70 lb-in	Floating	24 Vac	—	2	< 125	MN6110A1201	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
MF41-6083-510	NSR	70 lb-in	Floating	24 Vac	0-1 kOhm	—	< 125	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF41-6153	NSR	133 lb-in	Floating	24 Vac	—	—	< 125	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
MF41-6343	NSR	300 lb-in	Floating	24 Vac	—	—	< 145	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
MF4D-6043-100	NSR	35 lb-in	Floating	24 Vac, 20-30 Vdc	—	—	< 85	MS7505A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF4D-6083-100	NSR	70 lb-in	Floating	24 Vac, 20-30 Vdc	—	—	< 85	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF4E-60430-100	NSR	35 lb-in	Floating	24 Vac	—	—	90	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
MF4E-60830-100	NSR	70 lb-in	Floating	24 Vac	—	—	90	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
MS41-6043	NSR	35 lb-in	0-10 Vdc	24 Vac	0-10 Vdc	—	< 90	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-6043-502	NSR	35 lb-in	0-10 Vdc	24 Vac	0-10 Vdc	2	< 90	MN7505A2209	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MS41-6043-520	NSR	35 lb-in	0-10 Vdc (adjustable)	24 Vac	0-10 Vdc	—	< 90	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-6043-522	NSR	35 lb-in	0-10 Vdc (adjustable)	24 Vac	0-10 Vdc	2	< 90	MN7505A2209	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MS41-6083	NSR	70 lb-in	0-10 Vdc	24 Vac	0-10 Vdc	—	< 125	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-6083-502	NSR	70 lb-in	0-10 Vdc	24 Vac	0-10 Vdc	2	< 125	MN7510A2209	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MS41-6083-520	NSR	70 lb-in	0-10 Vdc (adjustable)	24 Vac	0-10 Vdc	—	< 125	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-6083-522	NSR	70 lb-in	0-10 Vdc (adjustable)	24 Vac	0-10 Vdc	2	< 125	MN7510A2209	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MS41-6153	NSR	133 lb-in	0-10 Vdc	24 Vac	0-10 Vdc	—	< 125	MN7220A2007	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-6153-502	NSR	133 lb-in	0-10 Vdc	24 Vac	0-10 Vdc	2	< 125	MN7220A2205	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MS41-6340	NSR	300 lb-in	2-10 Vdc, 4-20 mA	120 Vac	—	—	< 145	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-6341	NSR	300 lb-in	2-10 Vdc, 4-20 mA	240 Vac	—	—	< 145	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-6343	NSR	300 lb-in	2-10 Vdc, 4-20 mA	24 Vac	—	—	< 145	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-6043-100	NSR	35 lb-in	2-10 Vdc	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-6043-150	NSR	35 lb-in	0-10 Vdc	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90

# Direct Coupled Actuators

Invensys (cont.)														
Invensys Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)
MS4D-6043-160	NSR	35 lb-in	4-20 mA	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-6083-100	NSR	70 lb-in	2-10 Vdc	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-6083-150	NSR	70 lb-in	0-10 Vdc	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-6083-160	NSR	70 lb-in	4-20 mA	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS50-H2001	NSR	300 lb-in	1-5 Vdc, 4-20 mA	120 Vac	—	—	145	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS50-H2101	NSR	300 lb-in	1-5 Vdc, 4-20 mA	240 Vac	—	—	145	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS50-H2301	NSR	300 lb-in	1-5 Vdc, 4-20 mA	24 Vac	—	—	145	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MA40-7043	SR	35 lb-in	On/Off	24 Vac, 22-30 Vdc	—	—	< 50	MS8105A1030	44 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
MA40-7043-501	SR	35 lb-in	On/Off	24 Vac, 22-30 Vdc	—	1	< 50	MS8105A1130	44 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	1	45
MA40-7170	SR	150 lb-in	On/Off	120 Vac	—	—	< 145	MS4120A1001	175 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
MA40-7171	SR	150 lb-in	On/Off	240 Vac	—	—	< 145	MS4120A1001	175 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
MA40-7173	SR	150 lb-in	On/Off	24 Vac, ±20%	—	—	< 145	MS8120A1007	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
MA41-7073	SR	60 lb-in	On/Off	24 Vac, 22-30 Vdc	—	—	< 80	MS8110A1008	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
MA41-7073-502	SR	60 lb-in	On/Off	24 Vac, 22-30 Vdc	—	2	< 80	MS8110A1206	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
MA41-7153	SR	133 lb-in	On/Off	24 Vac, 22-30 Vdc	—	—	< 190	MS8120A1007	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
MA41-7153-502	SR	133 lb-in	On/Off	24 Vac, 22-30 Vdc	—	2	< 190	MS8120A1205	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
MA4D-7030-000	SR	30 lb-in	On/Off	120 Vac	—	—	< 56	MS4105A1030	44 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
MA4D-7031-000	SR	30 lb-in	On/Off	230 Vac	—	—	< 56	MS4105A1030	44 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
MA4D-7033-100	SR	30 lb-in	On/Off	24 Vac, 20-30 Vdc	—	—	< 56	MS8105A1008	44 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
MA4D-8030-000	SR	30 lb-in	On/Off	120 Vac	—	—	< 56	MS4105A1030	44 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
MA4D-8031-000	SR	30 lb-in	On/Off	230 Vac	—	—	< 56	MS4105A1030	44 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
MA4D-8033-100	SR	30 lb-in	On/Off	24 Vac, 20-30 Vdc	—	—	< 56	MS8105A1008	44 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
MF40-7043	SR	35 lb-in	Floating	24 Vac, 22-30 Vdc	—	—	< 130	MS7505A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF40-7043-501	SR	35 lb-in	Floating	24 Vac, 22-30 Vdc	—	1	< 130	MS7505A2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
MF40-7173	SR	150 lb-in	Floating	24 Vac, ±20%	—	—	< 145	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF41-7073	SR	60 lb-in	Floating	24 Vac, 22-30 Vdc	—	—	< 195	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF41-7073-502	SR	60 lb-in	Floating	24 Vac, 22-30 Vdc	—	2	< 195	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MF41-7153	SR	133 lb-in	Floating	24 Vac, 22-30 Vdc	—	—	< 190	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF41-7153-502	SR	133 lb-in	Floating	24 Vac, 22-30 Vdc	—	2	< 190	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MF4D-7033-100	SR	30 lb-in	Floating	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MS7505A2008	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MF4D-8033-100	SR	30 lb-in	Floating	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MS7505A2008	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS40-7043	SR	35 lb-in	2-10 Vdc, 4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	—	< 130	MS7505A2030	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS40-7043-501	SR	35 lb-in	2-10 Vdc, 4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	1	< 130	MS7505A2130	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
MS40-7170	SR	150 lb-in	2-10 Vdc, 4-20 mA	120 Vac	—	—	< 145	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS40-7171	SR	150 lb-in	2-10 Vdc, 4-20 mA	240 Vac	—	—	< 145	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS40-7173	SR	150 lb-in	2-10 Vdc, 4-20 mA	24 Vac, ±20%	—	—	< 145	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-7073	SR	60 lb-in	2-10 Vdc, 4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	—	< 195	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-7073-502	SR	60 lb-in	2-10 Vdc, 4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	2	< 195	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MS41-7153	SR	133 lb-in	2-10 Vdc, 4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	—	< 190	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS41-7153-502	SR	133 lb-in	2-10 Vdc, 4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	2	< 190	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
MS4D-7033-100	SR	30 lb-in	2-10 Vdc, 4-20 mA	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MS7505A2008	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-7033-150	SR	30 lb-in	0-10 Vdc, 4-20 mA	24 Vac, 20-30 Vdc	2-10 Vdc	—	< 85	MS7505A2008	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-7033-160	SR	30 lb-in	4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	—	< 85	MS7505A2008	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-8033-100	SR	30 lb-in	2-10 Vdc, 4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	—	< 85	MS7505A2008	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-8033-150	SR	30 lb-in	0-10 Vdc, 4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	—	< 85	MS7505A2008	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS4D-8033-160	SR	30 lb-in	4-20 mA	24 Vac, 22-30 Vdc	2-10 Vdc	—	< 85	MS7505A2008	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS50-E2001	SR	150 lb-in	1-5 Vdc, 4-20 mA	120 Vac	—	—	145	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS50-E2101	SR	150 lb-in	1-5 Vdc, 4-20 mA	240 Vac	—	—	145	MS7520A2007	175 lb-in	On/Off	24 Vac/Vdc	(0) 2-10 Vdc	—	90
MS50-E2301	SR	150 lb-in	1-5 Vdc, 4-20 mA	24 Vac	—	—	145	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90

Invensys Notes: All models described as (0)2-10 Vdc can be used with a 4-20 mA control input. Shunt a 500 kOhm, 1/2 W resistor across the input at the actuator.

# Direct Coupled Actuators

Siemens														
Siemens Model	Fail Safe	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)	Honeywell Model	Torque (lb-in)	Control Signal	Power	Feedback	Switches	Timing (sec)
GDE131.1U	NSR	44 lb-in	Floating	24 Vac	—	—	90	MN6105A1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GDE131.1P	NSR	44 lb-in	Floating	24 Vac	—	—	90	MN6105W1011	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GDE161.1P	NSR	44 lb-in	0-10 Vdc	24 Vac	0-1 kOhm	—	90	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GDE132.1P	NSR	44 lb-in	Floating	24 Vac	0-1 kOhm	—	90	MN7505A2001	44 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GDE136.1P	NSR	44 lb-in	Floating	24 Vac	—	2	90	MN6105A1201	44 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
GLB131.1P	NSR	88 lb-in	Floating	24 Vac	—	—	125	MN6110A1003	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GLB161.1P	NSR	88 lb-in	0-10 Vdc	24 Vac	—	—	125	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GLB132.1P	NSR	88 lb-in	Floating	24 Vac	0-1 kOhm	—	125	ML6174A2002 + 200976C	70 lb-in	On/Off, Floating	24 Vac	0-2 kOhm	—	90
GLB136.1P	NSR	88 lb-in	Floating	24 Vac	—	2	125	MN6110A1201	88 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
GLB163.1P	NSR	88 lb-in	0-10 Vdc	24 Vac	—	—	125	MN7510A2001	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GLB164.1P	NSR	88 lb-in	0-10 Vdc	24 Vac	—	2	125	MN7510A2209	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GLB166.1P	NSR	88 lb-in	0-10 Vdc	24 Vac	—	2	125	MN7510A2209	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GEB131.1U	NSR	132 lb-in	Floating	24 Vac	—	—	125	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GEB136.1U	NSR	132 lb-in	Floating	24 Vac	—	2	125	MN6120A1200	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
GEB161.1U	NSR	132 lb-in	0-10 Vdc	24 Vac	—	—	125	MN7220A2007	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	—	—	90
GBB171.1P	NSR	221 lb-in	On/Off, Floating	24 Vac	—	—	150	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GBB131.1U	NSR	221 lb-in	Floating	24 Vac	—	—	150	MN6120A1002	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GBB136.1U	NSR	221 lb-in	Floating	24 Vac	—	—	150	MN6120A1200	175 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GBB161.1U	NSR	221 lb-in	0-10 Vdc	24 Vac	—	—	150	MN7220A2007	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GBB166.1U	NSR	221 lb-in	0-10 Vdc	24 Vac	—	2	150	MN7220A2205	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GBB151.1P	NSR	221 lb-in	4-20 mA	24 Vac	—	—	150	MN7220A2007	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GBB166.1P	NSR	221 lb-in	0-10 Vdc	24 Vac	—	2	150	MN7220A2205	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GBB156.1P	NSR	221 lb-in	4-20 mA	24 Vac	—	2	150	MN7220A2205	175 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GIB131.1U	NSR	310 lb-in	Floating	24 Vac	—	—	150	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GIB136.1U	NSR	310 lb-in	Floating	24 Vac	—	2	150	MN6134A1003 + SW2-US	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	2	90
GIB171.1U	NSR	310 lb-in	On/Off, Floating	24 Vac	—	—	150	MN6134A1003	300 lb-in	On/Off, Floating	24 Vac/Vdc	—	—	90
GIB161.1U	NSR	310 lb-in	0-10 Vdc	24 Vac	—	—	150	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GIB151.1U	NSR	310 lb-in	4-20 mA	24 Vac	—	—	150	MN7234A2008	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GIB166.1U	NSR	310 lb-in	0-10 Vdc	24 Vac	—	2	150	MN7234A2008 + SW-US2	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GIB156.1U	NSR	310 lb-in	4-20 mA	24 Vac	—	2	150	MN7234A2008 + SW2-US	300 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GQD121.1P	SR	20 lb-in	On/Off	24 Vac/dc	—	—	30	MS8103A1030	27 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
GQD126.1P	SR	20 lb-in	On/Off	24 Vac/dc	—	2	30	MS8103A1130	27 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	1	45
GQD221.1U	SR	20 lb-in	On/Off	120 Vac	—	—	30	MS4103A1030	27 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
GQD226.1U	SR	20 lb-in	On/Off	120 Vac	—	2	30	MS4103A1130	27 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
GQD131.1P	SR	20 lb-in	Floating	24 Vac/dc	—	—	30	MS7503A2030	27 lb-in	Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GQD136.1P	SR	20 lb-in	Floating	24 Vac/dc	—	2	30	MS7503A2130	27 lb-in	Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
GQD151.1P	SR	20 lb-in	2-10 Vdc	24 Vac/dc	2-10 Vdc	—	30	MS7503A2030	27 lb-in	Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GQD156.1P	SR	20 lb-in	2-10 Vdc	24 Vac/dc	2-10 Vdc	2	30	MS7503A2130	27 lb-in	Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	1	90
GMA121.1U	SR	62 lb-in	On/Off	24 Vac/dc	—	—	90	MS8110A1008	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
GMA121.1P	SR	62 lb-in	On/Off	24 Vac/dc	—	—	90	MS8110W1008	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
GMA126.1U	SR	62 lb-in	On/Off	24 Vac/dc	—	2	90	MS8110A1206	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
GMA126.1P	SR	62 lb-in	On/Off	24 Vac/dc	—	2	90	MS8110W1206	88 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
GMA221.1U	SR	62 lb-in	On/Off	120 Vac	—	—	90	MS4110A1002	88 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
GMA226.1U	SR	62 lb-in	On/Off	120 Vac	—	2	90	MS4110A1200	88 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
GMA131.1U	SR	62 lb-in	Floating	24 Vac/Vdc	—	—	90	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMA131.1P	SR	62 lb-in	Floating	24 Vac/Vdc	—	—	90	MS7510W2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMA132.1U	SR	62 lb-in	Floating	24 Vac/Vdc	0-1 kOhm	—	90	MS7510A2008	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMA136.1U	SR	62 lb-in	Floating	24 Vac/dc	—	2	90	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GMA151.1U	SR	62 lb-in	2-10 Vdc	24 Vac/Vdc	0-1 kOhm	—	90	MS7510A2008	88 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMA151.1P	SR	62 lb-in	2-10 Vdc	24 Vac/Vdc	0-1 kOhm	—	90	MS7510W2008	88 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GMA156.1U	SR	62 lb-in	2-10 Vdc	24 Vac/Vdc	0-1 kOhm	2	90	MS7510A2206	88 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GMA156.1P	SR	62 lb-in	2-10 Vdc	24 Vac/Vdc	0-1 kOhm	2	90	MS7510W2206	88 lb-in	(0) 2-10 Vdc, (0) 4-20 mA	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA121.1U	SR	160 lb-in	On/Off	24 Vac/dc	—	—	90	MS8120A1007	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
GCA121.1P	SR	160 lb-in	On/Off	24 Vac/dc	—	—	90	MS8120W1007	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	—	45
GCA126.1U	SR	160 lb-in	On/Off	24 Vac/dc	—	2	90	MS8120A1205	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
GCA126.1P	SR	160 lb-in	On/Off	24 Vac/dc	—	2	90	MS8120W1205	175 lb-in	Two-Position (SPST)	24 Vac/Vdc	—	2	45
GCA221.1U	SR	160 lb-in	On/Off	120 Vac	—	—	90	MS4120A1001	175 lb-in	Two-Position (SPST)	100-250 Vac	—	—	45
GCA226.1U	SR	160 lb-in	On/Off	120 Vac	—	2	90	MS4120A1209	175 lb-in	Two-Position (SPST)	100-250 Vac	—	2	45
GCA131.1U	SR	160 lb-in	Floating	24 Vac/dc	—	—	90	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GCA131.1P	SR	160 lb-in	Floating	24 Vac/dc	—	—	90	MS7520W2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GCA136.1U	SR	160 lb-in	Floating	24 Vac/dc	—	2	90	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA136.1P	SR	160 lb-in	Floating	24 Vac/dc	—	2	90	MS7520W2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA132.1U	SR	160 lb-in	Floating	24 Vac/dc	0-1 kOhm	—	90	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GCA132.1P	SR	160 lb-in	Floating	24 Vac/dc	0-1 kOhm	—	90	MS7520W2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GCA151.1U	SR	160 lb-in	4-20 mA	24 Vac/dc	—	—	90	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GCA151.1P	SR	160 lb-in	4-20 mA	24 Vac/dc	—	—	90	MS7520W2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GCA156.1U	SR	160 lb-in	4-20 mA	24 Vac/dc	—	2	90	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA156.1P	SR	160 lb-in	4-20 mA	24 Vac/dc	—	2	90	MS7520W2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA161.1U	SR	160 lb-in	0-10 Vdc	24 Vac/dc	—	—	90	MS7520A2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GCA161.1P	SR	160 lb-in	0-10 Vdc	24 Vac/dc	—	—	90	MS7520W2007	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	—	90
GCA166.1U	SR	160 lb-in	0-10 Vdc	24 Vac/dc	—	2	90	MS7520A2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA166.1P	SR	160 lb-in	0-10 Vdc	24 Vac/dc	—	2	90	MS7520W2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA163.1U	SR	160 lb-in	0-10 Vdc	24 Vac/dc	—	—	90	MS7520H2208	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA164.1U	SR	160 lb-in	0-10 Vdc	24 Vac/dc	—	2	90	MS7520H2208	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90
GCA166.1P	SR	160 lb-in	0-10 Vdc	24 Vac/dc	—	2	90	MS7520W2205	175 lb-in	On/Off, Floating, (0) 2-10 Vdc	24 Vac/Vdc	(0) 2-10 Vdc	2	90

Siemens Notes: All models described as (0) 2-10 Vdc can be used with a 4-20 mA control input. Shunt a 500 kOhm, 1/2 W resistor across the input at the actuator.