



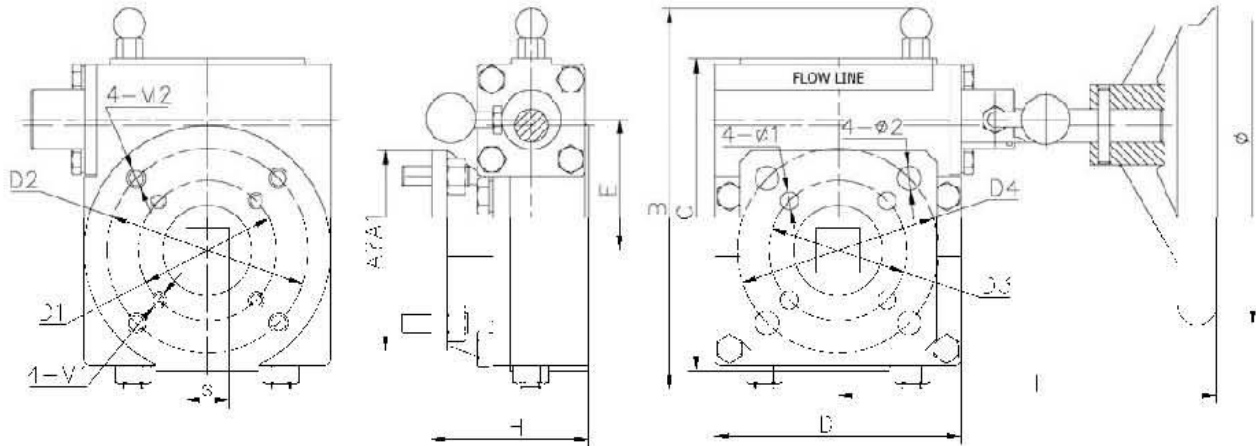
## Series 16 Manual Override

The Series 16 Manual Overrides have worm-gear drive ensuring pipeline fluid flow does not alter valve position. They direct-mount without brackets & couplings on butterfly and ball valves with ISO 5211 mounting surfaces and shaft dimensions. The Series 16 Manual Overrides mounting pad accepts Flow Line Controls Series 20 and 21 pneumatic actuators and all other actuators conforming to ISO 5211 standards. The Series 16 De-clutch lever disengages the handwheel when the manual override is not in use. Flow Line Controls strongly recommends the addition of Part #NV62 Block & Vent Valve to release compressed air from the pneumatic actuator significantly reduces handwheel effort. A 3-Stage Adapter may be required to link the valve stem to the actuator female drive. Refer to FLC1602 for adapter dimensions and part numbers.

### Specifications:

Housing & Handwheel: Ductile iron  
Worm Gear & Spur Gear: Steel

Hardware: Carbon steel  
Drive: Female square, ISO 5211  
Lubrication: Permanently greased



### Dimensions:

PART NUMBER	VALVE SIZE*	GEAR RATIO	WEIGHT POUNDS	OUTPUT IN-LBS	HANDWHEEL DIAMETER Ø	d	b	S
16-00226	2" - 6"	26:1	14.8	2655	7.9	0.87	0.31	17 mm
16-00238	8" - 10"	38:1	28.7	6195	11.8	1.77	0.55	22 mm
16-00254	12"	54:1	37.5	10621	11.8	2.36	0.70	22 mm
16-00280	14" - 18"	80:1	48.5	17701	15.7	2.36	0.70	27 mm
16-00278	20" - 24"	78:1	68.3	27437	23.6	2.36	0.70	36 mm

PART NUMBER	BOTTOM PATTERN				TOP PATTERN				H	L	B	C	D	E
	D1	4-M1	D2	4-M2	D3	4-Ø1	D4	4-Ø2						
16-00226	F07	4-M8	N/A	N/A	F07	4-M8	N/A	N/A	2.79	7.55	6.53	5.11	4.09	1.98
16-00238	F07	4-M8	F10	4-M10	F07	4-M8	F10	4-M10	3.46	8.85	7.51	6.14	4.92	2.57
16-00254	F10	4-M10	F12	4-M12	F10	4-M10	N/A	N/A	4.05	9.17	9.21	7.87	6.88	3.36
16-00280	F16	4-M20	N/A	N/A	F14	4-M16	N/A	N/A	4.48	10.90	12.24	10.98	9.21	4.84
16-00278	F16	4-M20	N/A	N/A	F14	4-M16	N/A	N/A	4.72	10.43	14.29	12.67	10.86	5.57

\* Valve sizes are based on Flow Line Valve & Controls butterfly valves  
DIMENSIONS: Inches unless otherwise noted

### Flow Line Controls, Inc.

P.O. Box 677 · Schriever, LA 70395 · Phone: 985-414-6003 · Toll Free 1-800-815-9226 · Fax 985-414-6072

[www.flowlinecontrols.com](http://www.flowlinecontrols.com)

Doc. No. FLC1601 © 2009 Flow Line