



# torque control

## SERIES: CT1- CV1

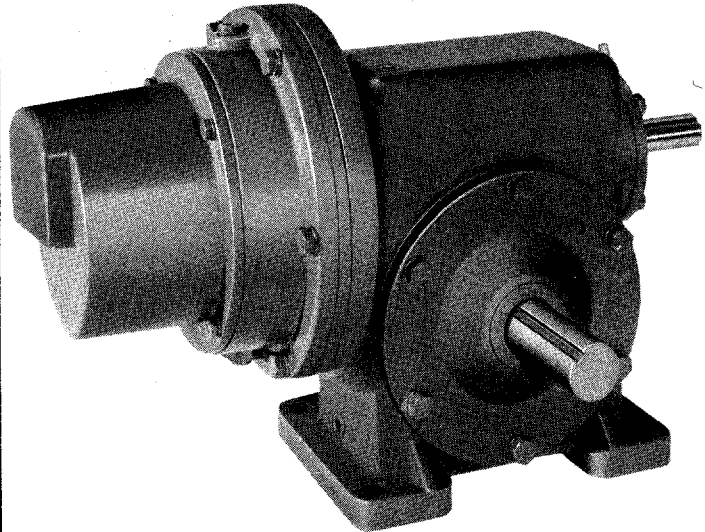
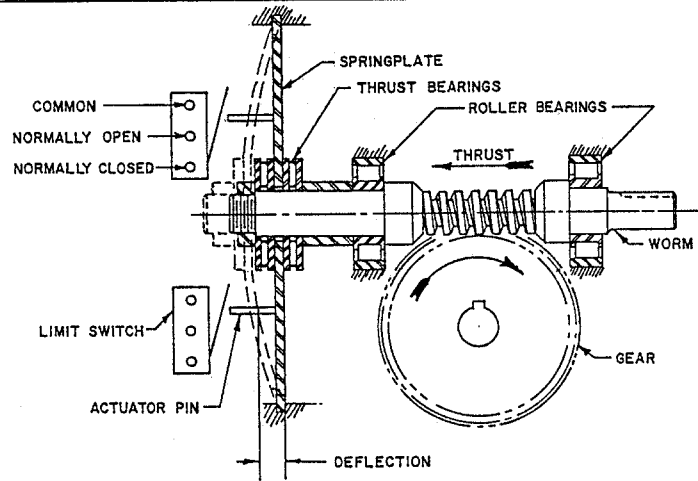
11 Sizes  
Models 5 THRU 15  
For Winsmith Worm Gear Speed Reducers  
and Gearmotors

"1" Series Torque Control Unit
5c - 9c
10c - 14c
15c

Winsmith Torque Controls are available for the  
following Winsmith units:

Torque Controls	Single & Double Reduction Speed Reducers & Gearmotors	Triple Reduction
5 thru 15 CT1 & CV1	5 thru 15 CT - CV CTX-CVX CTD-CVD MCTD-MCVD L, LX, & LD-MLD	5 - 15 CTT-CVT MCTT-MCVT
5, 6, 7, 8, 9, 10 & 12 SF1, SFD1	5, 6, 7, 8, 9, 10, 12 SF & ST SFD, STD MSFD, MSTD	5-15 STT-SFT MSTT-MSFT

Winsmith Torque Controls are identified by the same model numbers  
as the speed reducers and gearmotors for which they are designed.



WINSMITH TORQUE CONTROLS are designed as optional equipment for specific models of Winsmith Speed Reducers and Gearmotors—single, double and triple reduction. They are torque limiting devices which protect the driving and driven equipment as well as the speed reducer against overload damage. Torque Controls are widely used in agitator, batching and mixing applications where varying density of material creates a constant overload hazard.

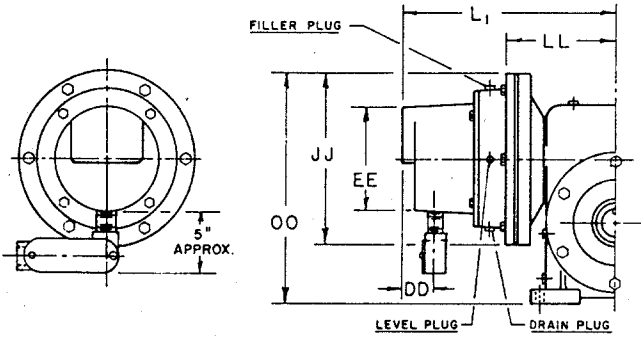
Winsmith Torque Controls cut machine downtime to a minimum or eliminate it completely. Installed with a reversing control panel, the machine can be reversed far enough to free the obstruction — the Torque Control automatically resets — and then the operation is resumed in the normal direction of rotation.

With Winsmith Torque Control, when the output torque of the reducer or gearmotor exceeds a predetermined limit, a micro switch instantly breaks the motor control circuit. These controls can be supplied for either one or two directions of rotation. In single direction of operation, the Torque Control senses two

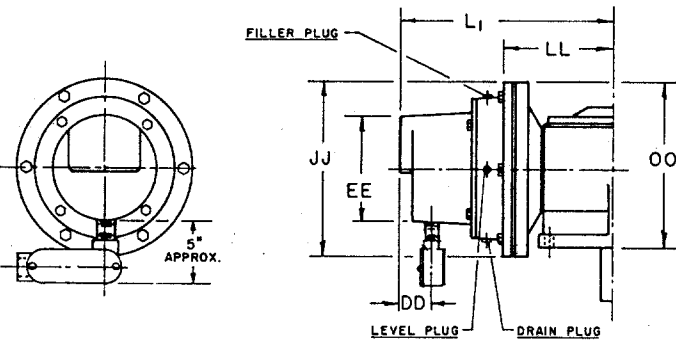
torques — one to energize an alarm circuit, the other to actuate the motor cut-off switch. The alarm circuit is actuated at the rated output torque of the reducer, while the motor cut-off torque is set for approximately 25% above this rating. When the reducer operates in two directions, the control still senses two torques — but only one in each direction. They are each used to actuate motor cut-off switches, thus providing overload protection in both directions of rotation.

Winsmith Torque Controls have been in service for many years in all types of applications, notably water and sewage treatment, with marked success. They are soundly engineered and ruggedly constructed with a minimum number of moving or wearing parts. Factory set to predetermined torque limits, Winsmith Torque Controls do not have to be reset or adjusted in the field for the life of the reducer. They will perform satisfactorily in all kinds of environment — both indoors and outdoors. Weather has no effect on the performance of Winsmith Torque Controls.

## DIMENSIONS:



**CT1**

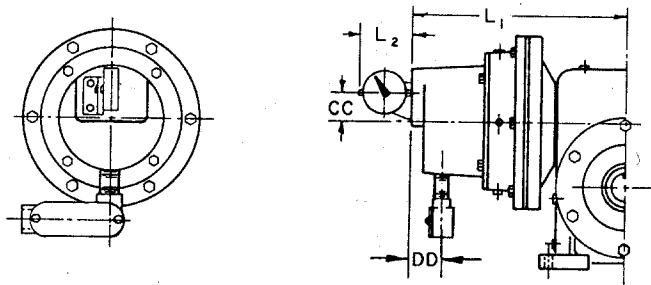


**CV1**

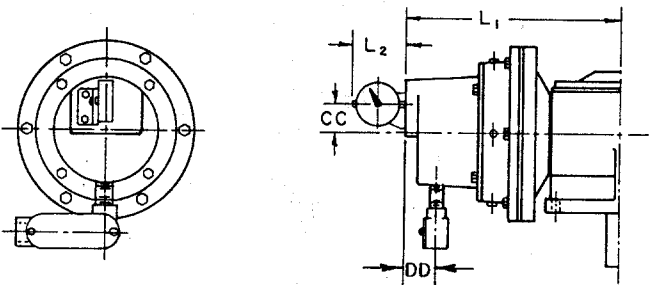
### TORQUE CONTROL DIMENSIONS

UNIT	EE	DD	JJ	L <sub>1</sub>	LL	OO	OO
5	5	1 1/2	8 1/4	10 9/16	5 1/2	11 1/8	7 7/8
6	5	1 1/2	8 1/4	10 15/16	5 7/8	12 1/8	8 1/8
7	5	1 1/2	8 1/4	11 13/16	6 3/4	13 1/8	8 5/8
8	5	1 1/2	8 1/4	12 3/16	7 1/2	14 1/4	9 1/8
9	5	1 1/2	8 1/4	13 1/16	8	15 5/16	9 5/8
10	5 1/8	1 1/2	10	14 11/16	9 3/16	16	11
11	5 1/8	1 1/2	10	15	9 1/2	19	12
12	5 1/8	1 1/2	10	16 3/16	10 1/16	20 1/2	13
13	5 7/8	1 1/2	10	16 3/8	11 3/8	22	14
14	5 7/8	1 1/2	10	18 5/16	12 13/16	23 1/8	15
15	6 1/2	1 1/2	13	20 3/16	14 13/16	28 1/2	17

ALL DIMENSIONS IN INCHES



**CT2 WITH DIAL INDICATOR**



**CV2 WITH DIAL INDICATOR**

### DIAL INDICATOR DIMENSIONS

ALL OTHER DIMENSIONS SAME AS STANDARD CT1 & CV1

UNIT	L <sub>1</sub>	L <sub>2</sub>	CC	DD
5	10 7/16	2 7/8	1 1/2	1 3/8
6	10 13/16	2 7/8	1 1/2	1 3/8
7	11 1/16	2 7/8	1 1/2	1 3/8
8	12 7/16	2 7/8	1 1/2	1 3/8
9	12 13/16	2 7/8	1 1/2	1 3/8
10	14 9/16	2 7/8	2	1 3/8
11	14 7/8	2 7/8	2	1 3/8
12	16 1/16	2 7/8	2	1 3/8
13	16 3/4	2 7/8	2	1 3/8
14	18 3/16	2 7/8	2	1 3/8
15	20 1/16	2 7/8	2 1/4	1 3/8

ALL DIMENSIONS IN INCHES

For construction purposes send for Certified Dimension Sheets.

**NOTE:** On single reduction units, the coupling between the high speed shaft and the motor shaft must be the type that allows up to 1/32" of lateral movement. A belt drive, spur or helical gear drive is also satisfactory. A RIGID SLEEVE TYPE COUPLING CANNOT BE USED.