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**Title: 34B, 34C, 34CW, 34CH, 34T, 34F Manual/Mechanical Operators**

**ISO Date:** April 10, 2006

#### **Don't Take Chances**

Compressed air is an extremely powerful medium. Always take maximum precautions when handling any component of a compressed air system. **Never** attempt to construct, replace, operate or service any component of a compressed air system unless you have been specifically and properly trained to do so. **Always** disconnect the supply air, and exhaust the air system before attempting to remove or service a component of that system. Failure to heed these warnings could result in SERIOUS, EVEN FATAL, PERSONAL INJURY.

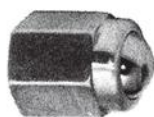
#### **Design And Specifications**

The design and specifications and other product information contained in this catalog is for general reference purposes based upon customary and usual manufacturing standards and product applications. However, it is difficult to predict or to anticipate the functioning or suitability of the product for any particular application or use. Therefore, nothing herein shall be deemed a representation or warranty of the product design or specifications and Buyer shall have the responsibility for investigating and testing the product in any particular application or use and all risks attendant in such use.

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# Humphrey TAC-TAC<sup>2</sup>-TAC<sup>3</sup> Manual/Mech. Operators

These operators are used to convert TAC, TAC<sup>2</sup>, and TAC<sup>3</sup> push-button valves to manual or mechanical operation.



## 34B Ball Operator

Model 34B ball operator threads onto the collar of any TAC Series push-button valve. The ball is not retained until threaded onto valve. The 0.078-inch thickness of the #8-60 or #8-600 mounting bracket plus the 0.015-inch thickness of the lockwasher properly spaces the 34B to prevent prestroking of the button. Stroke is 0.093-inch. Actuating forces are shown in the accompanying chart. Weight: 0.88 oz. (24.8 gms.).



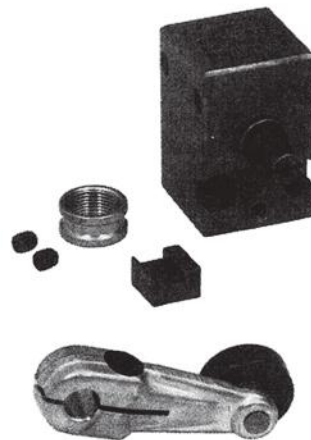
## 34C Cam Operator

Model 34C operator's actuating force varies by valve type and pressure as shown in the accompanying chart. Adjustment of cam roller height is made through the use of a mounting bracket and locknuts. The cam surface should release roller quickly for best valve response. Weight: 1 oz. (38.4 gms.).



## 34CW Cam Operator with One-Way Actuation

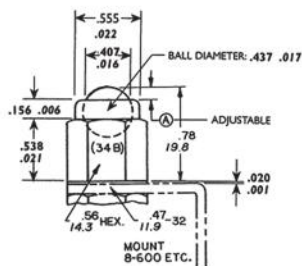
Model 34CW cam operator actuates valve when the pawl is contacted from lever side. The pawl then folds out of the way in the opposite direction. The spring-loaded Nylatron pawl has high tensile strength and excellent wear characteristics and is self-lubricating. Actuation forces are shown in accompanying chart. Weight: 1 oz. (38.4 gms.).



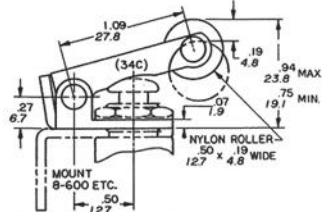
## 34CH Heavy-Duty Cam Operator

Model 34CH heavy-duty cam operator is for use with all TAC series valves except TAC<sup>3</sup> valves. Its spline actuator shaft adapts to Cam Roller 28-60A (Order cam roller separately) and other commercially available actuator styles. The mean stroke is 15° each for prestroke, fully open, and overstroke. Dimensions: 1.5"H x 1"W x 1"D. Weight: 3 oz. (85 gms.).

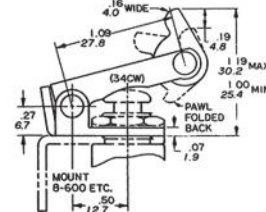
34B



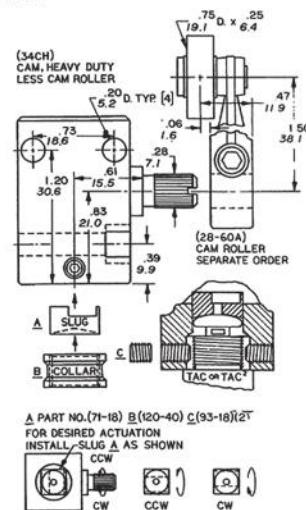
34C



34CW



34CH



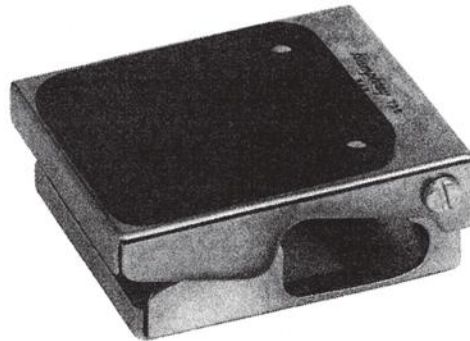
## 34CH Assembly Instructions

- Position square slug into 34CH for desired actuation. The slug drill point rests on valve button.
- Thread collar fully onto valve.
- Insert valve/collar behind slug and secure by tightening #8-32 set screws at 90°.
- Mount 34CH, not valve, to equipment.
- Attach cam roller to spline actuator.



### 34T Fingertip Operator

Model 34T fingertip operator may be used with any TAC Series push-button valve to provide easier actuation. Actuation forces are shown in accompanying chart.



### 34F Foot, Knee, or Hand Operator

Model 34F foot, knee, or hand operator may be used with any TAC Series push-button valve except the TAC<sup>3</sup>. To install, disassemble the 34F by removing screws. Mount valve shoulder to bracket and retain with locknut

and lockwasher. Back and sides are left open for plumbing. Non-skid rubber pads on both sides. Mount to equipment with two 0.187-inch Dia. holes on 1.625-inch centers, 0.562 inches from back.

## Specification

### Force To Actuate in Ounces/Grams

### Models 34C & 34CW

VALVED PRESSURE	30 psig	(2.1 bars)	60 psig	(4.2 bars)	100 psig	(7.0 bars)
2P	15	425	16	454	18	510
3P	19	539	27	765	38	1077
4P	22	624	22	624	23	652
4PP	6	170	7	198	8	227
31P	40	1134	44	1247	52	1474
41P	44	1247	52	1474	67	1899
41PP	26	737	28	794	34	964
42P	49	1389	66	1871	94	2665
42PP/PA	14	397	17	482	22	624
ESB	7	198				
34CH*	40	1134 Maximum				

\*Use with TAC/TAC<sup>2</sup> Only.

### Force to Actuate in Ounces/Grams

### Model 34B†

VALVED PRESSURE	30 psig	(2.1 bars)	60 psig	(4.2 bars)	100 psig	(7.0 bars)
2P	32	907	36	1021	48	1361
3P	38	1077	54	1531	76	2155
4P	44	1247	44	1247	46	1304
4PP	12	340	14	397	16	454
31P	64	1814	72	2041	88	2495
41P	87	2466	104	2948	135	3827
41PP	52	1474	57	1616	67	1899
42P	97	2750	132	3742	189	5358
42PP/PA	26.5	751	34	964	43.5	1233
ESB	13	369				
34CH	40	1134 Maximum				

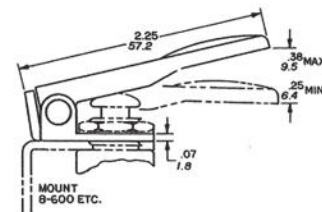
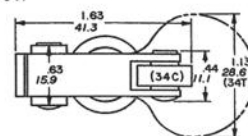
†Same force required to push valve button.

### Force To Actuate in Ounces/Grams

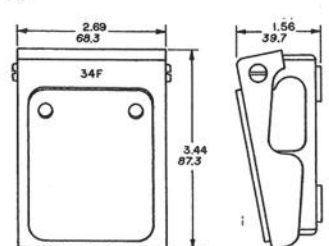
### Model 34T

VALVED PRESSURE	30 psig	(2.1 bars)	60 psig	(4.2 bars)	100 psig	(7.0 bars)
2P	10	284	12	340	14	397
3P	14	397	18	510	29	822
4P	16	454	16	454	17	482
4PP	5	142	6	170	7	198
31PP	28	794	32	907	40	1134
41P	32	907	38	1077	50	1418
41PP	19	539	21	595	25	709
42P	35	992	48	1361	69	1956
42PP/PA	10	284	13	369	16	454
ESB	5	142				

34T



34F





## MISCELLANEOUS PRODUCTS

### VALVES/MANIFOLD/FLOW CONTROL/REGULATOR

MODEL	Fluoroelastomer Seals	DESCRIPTION
RSR	NA	Self Relieving Regulator.
SC1	NA	Flow Control.
C125	Specify	Check Valve, 1/8-inch ports.
C1	NA	Check Valve, #10-32 ports
S125	Specify	Shuttle Valve, 1/8-inch ports.
AM8	NA	8 Port Air Manifold.

Order example: C125-VAI

REMEMBER: Option Codes marked STD, NA are not used as part of the Model Number when ordering.

### ELECTRIC STYLE

MODEL	DESCRIPTION
BA-2R-AR	2-Position Electric Switch (used with ESB).
ESB	Electric Switch Bracket.

### TAC, TAC<sup>2</sup>, TAC<sup>3</sup> FITTINGS/ACCESSORIES

#### ACCESSORIES

MODEL	DESCRIPTION
8-60	Bracket-Flat
8-600	Bracket-Angle
8-70	Bracket-Multiple
8-55A	Adapter for Cutler Hammer Electric Actuators

Order example: 8-600

### TAC, TAC<sup>2</sup>, TAC<sup>3</sup> FITTINGS

MODEL	UNIT	DESCRIPTION
BF*	bag-10	Barbed Fitting 1/8 O.D. Hose
BF1*	bag-10	Barbed Fitting 1/4 O.D. Hose
BHF*	bag-10	Bulkhead Fitting
CF*	bag-10	Coupling Fitting
EF*	bag-10	Elbow Fitting
EXF*	bag-10	Extension Fitting
MBTF*	bag-10	Male Branch Tee Fitting
NF*	bag-10	Nipple Fitting
PF*	bag-10	Plug Fitting
PBF1*	bag-10	1/8 Pipe Barbed Fitting
RBF*	bag-10	Reducer Bush, 1/8 NPT-#10-32
RBF1*	bag-10	Reducer Bush, 1/4 NPT-#10-32
SF*	bag-10	Swivel Fitting
SEF*	bag-10	Street Ell Fitting
TF*	bag-10	Tee Fitting
TCF*	bag-10	Tube Compression Fit. #10-32
TCF1*	bag-10	Tube Compression Fit. 1/8 NPT

\*Order by Quantity of Bags Only

Order example: TF

MODEL	UNIT	DESCRIPTION
UEF*	bag-10	Univ. Elbow Fitting
URTF*	bag-10	Univ. Running Tee Fitting
UTF*	bag-10	Univ. Tee Fitting
UXF*	bag-10	Univ. X Fitting
28-60A	ea	Cam Roller (For 34CH)
40-13*	bag-10	Hose Clamp-Sleeve for 1/4" O.D. Hose
71-18	ea	Slug (For 34CH)
89-14*	bag-100	Gasket
93-18	ea	Set Screw (For 34CH)
95-27	ea	Screw, UEF & UTF
97-21*	bag-10	Metering Screw
100-35*	bag-10	Lockwasher
110-21*	bag-10	Locknut
120-40	ea	Collar (For 34CH)
150-30A*	bag-10	Muffler # 10-32
150-31A*	bag-10	Muffler # 1/8 NPT
151-20	ea	Handy Wrench

\*Order by Quantity of Bags Only

Order example: 71-18