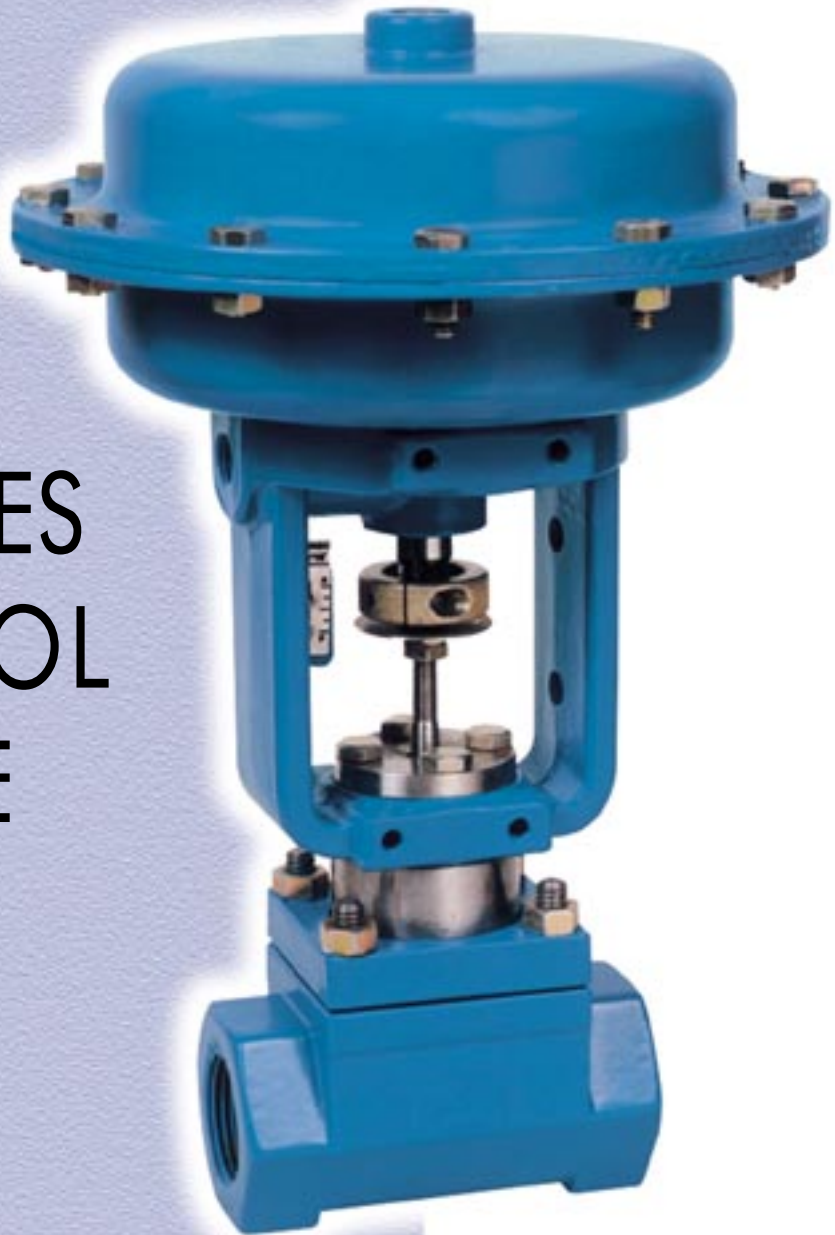




# 89 SERIES CONTROL VALVE



## Features

### Characteristic

Low and ultra low flow control valve.

### Available Types

#### **89-02**

With contour plug, top guided. Suitable for applications that require a good shutoff.

#### **89-12**

With contour plug, top guided and soft seat. Suitable for applications that require tight shutoff.

### Sizes

0.25, 0.375, 0.5, 0.75, 1, 1.5, and 2 in.

### End Connections

RC - NPT Threaded.

Sizes 1.5 and 2 in allow assembly between flanges, wafer type.

FR - Raised Face.

### Pressure-Temperature Ratings

ANSI B16.34 Class 150, 300 or 600 for sizes up to 1 in.

ANSI B16.34 Class 150 or 300 for sizes 1.5 or 2 in.

### Body Materials

ASTM A 216 Gr. WCB carbon steel  
or ASTM A 351 Gr. CF8M stainless steel.

### Bonnet Types

CE1 - Standard

CE3 - Extended, for very high or very low temperature.

### Trim Materials

304 stainless steel

316 stainless steel

304 stainless steel hard faced with Stellite

316 stainless steel hard faced with Stellite

420 stainless steel hardened

### Flow Characteristics and Cv

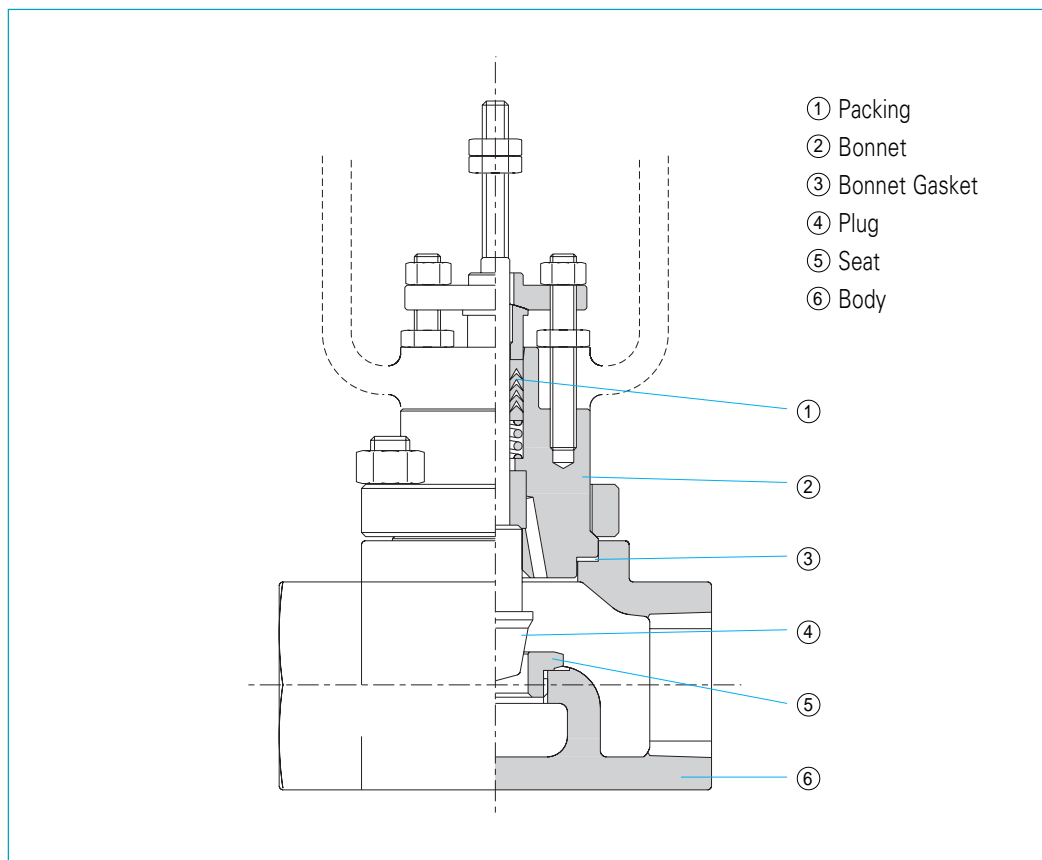
Linear or equal percentage. See Table.

### Shutoff Classifications (ANSI/FCI 70-2)

89-02 - Leakage class IV

89-12 - Leakage class VI

## Main parts identification



PORT SIZE		VALVE SIZE						
CODE	DIA. (in.)	0.25	0.375	0.5	0.75	1	1.5	2
M01	0.0625	0.0025	0.0025	0.0025	0.0025	0.0025	—	—
M02	0.0625	0.004	0.004	0.004	0.004	0.004	—	—
M03	0.0625	0.006	0.006	0.006	0.006	0.006	—	—
M04	0.0625	0.015	0.015	0.015	0.015	0.015	—	—
M05	0.0625	0.02	0.02	0.02	0.02	0.02	—	—
M25	0.125	0.04	0.04	0.04	0.04	0.04	—	—
M06	0.125	0.06	0.06	0.06	0.06	0.06	—	—
M07	0.125	0.08	0.08	0.08	0.08	0.08	—	—
M08	0.125	0.1	0.1	0.1	0.1	0.1	—	—
M09	0.125	0.16	0.16	0.16	0.16	0.16	—	—
M10	0.125	0.25	0.25	0.25	0.25	0.25	—	—
M11	0.1875	—	0.5	0.5	0.5	0.5	—	—
M12	0.25	—	—	1	1	1	—	—
M13	0.3125	—	—	—	1.5	1.5	—	—
M14	0.375	—	—	—	2	2	—	—
M15	0.375	—	—	—	2.5	2.5	—	—
M16	0.4375	—	—	—	3	3	—	—
M17	0.4375	—	—	—	3.5	3.5	—	—
M18	0.5	—	—	—	—	4	—	—
M19	0.5	—	—	—	—	4.5	—	—
M20	0.5625	—	—	—	—	5	—	—
M21	0.625	—	—	—	—	5.5	—	—
M22	0.625	—	—	—	—	6	—	—
M23	0.75	—	—	—	—	7	—	—
M24	0.75	—	—	—	—	8	—	—
I	1.25	—	—	—	—	—	17.5	—
	1.5	—	—	—	—	—	—	25
R	0.75	—	—	—	—	—	9	—
	1	—	—	—	—	—	—	17.5

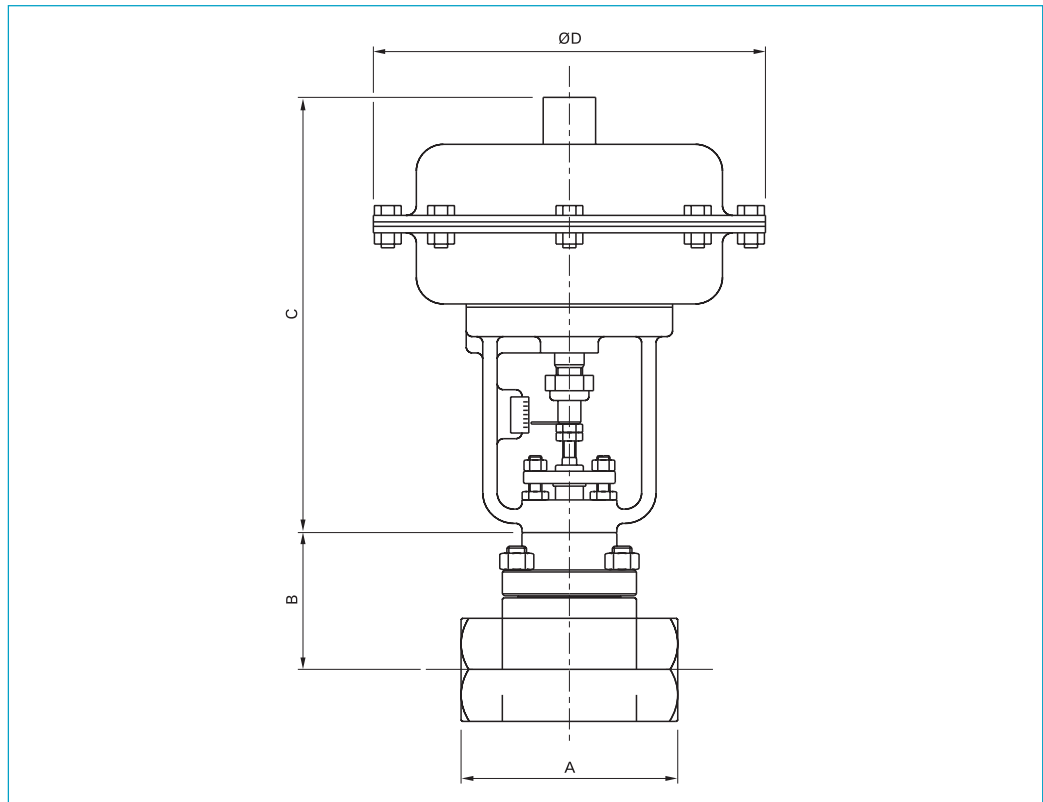
The **89 Series** control valve is normally operated by diaphragm/spring pneumatic actuators (DC series) or by double action or spring return pneumatic piston actuators (PP series).

Can also be supplied with electric actuator. Detailed information about actuators are given in specific bulletins.

## Actuators

## Dimensions

VALVE SIZE (in.)	ACTUATOR	DIMENSIONS (mm)			
		A	B	C	ØD
.25 / .375 / .5	DC 02	80	70	213	190
	DC 03			234	285
.75 / 1	DC 02	105	85	213	190
	DC 03			234	285
1.5	DC 06	114	120	312	285
	DC 07			339	336
2	DC 06	124	120	312	285
	DC 07			339	336



## Ordering information

1. Valve size and type
2. End connection style
3. Body material
4. Trim material
5. Bonnet type
6. Packing material
7. Maximum working condition
8. Normal working condition
9. Minimum working condition
10. Shutoff differential pressure
11. Specific gravity
12. Specific heat ratio
13. Critical pressure
14. Critical temperature
15. Viscosity
16. Inlet and outlet pipe diameter and thickness.

# HITER

HITER IND. E COM. CONTR. TERMO-HIDR. LTDA.  
 Rua Capitão Francisco Teixeira Nogueira, 233  
 CEP 05037-030 - Água Branca - São Paulo - Brasil  
 Phone.: +55 11 3611.0788  
 Fax: +55 11 3611.0921/3611.1711  
 e-mail: vendas@hiter.com.br - www.hiter.com.br

Representative

Bulletin 1169 / Rev. July 2000