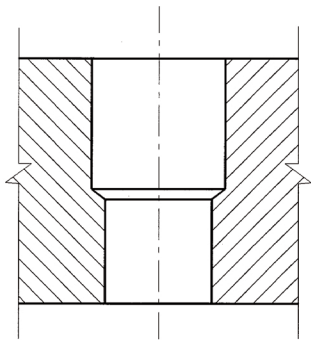


C_v Restrictors

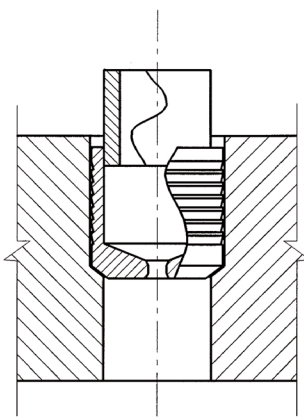


***For Precision
Metering of
Liquids &
Gases***

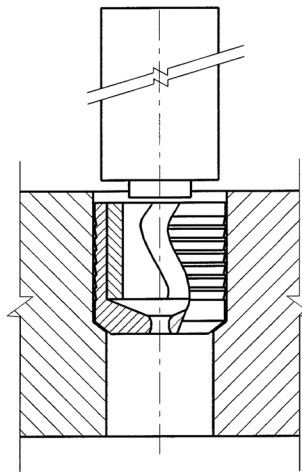
Fast Reliable Installation



Drilled hole $-0/+ .004"$ (1 mm)
Reaming not required



Place one piece
Cv Restrictor into hole



Press pin into Cv Restrictor
to complete installation

- ***Calibrated
Orifice***
- ***Easy
Installation***
- ***One Piece
Assembly***

Farmington Engineering, Inc.

7 Orchard Park Road, Madison, Connecticut 06443-2273

203-245-1100 Fax: 203-245-3072

CALL TOLL FREE 1-800-428-7584

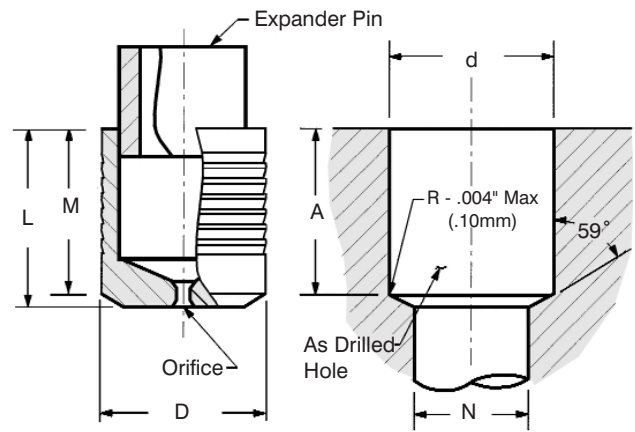
www.farmingtoneng.com E-mail: sales@farmingtoneng.com

Cv EXPANSION RESTRICTORS

STANDARD PART NUMBERS AND SPECIFICATIONS

Cv Expansion Restrictor Design Features:

- Calibrated Orifice
- All Stainless Steel
- Available in Custom Fittings
- Special Flow Testing Available
- Easy Installation into "As-drilled" hole



ENGLISH EXPANSION SIZES

Restrictor Dimensions					Hole Dimensions		
Part Number*	Tolerance						
	+0	+0 -.006	+0 -.006	+/- .001 (in)	+.004 -0	(Min)	(Max)
	D (in)	L (in)	M (in)	Standard Orifice Size (in)	d (in)	A (in)	N (in)
CRES1563□□□A	.1562/- .0012	.161	.149	.020 Thru .050	.1562	.149	.130
CRES1873□□□A	.1875/- .0012	.220	.208	.020 Thru .070	.1875	.208	.160
CRES2183□□□A	.2187/- .0012	.220	.208	.020 Thru .085	.2187	.208	.190
CRES2503□□□A	.2500/- .0012	.259	.247	.020 Thru .105	.2500	.247	.220
CRES2813□□□A	.2812/- .0014	.299	.287	.020 Thru .130	.2812	.287	.250
CRES3123□□□A	.3125/- .0014	.338	.326	.020 Thru .150	.3125	.326	.281
CRES3433□□□A	.3437/- .0014	.397	.385	.020 Thru .160	.3437	.385	.312
CRES3753□□□A	.3750/- .0014	.397	.385	.020 Thru .180	.3750	.385	.343
CRES4063□□□A	.4062/- .0014	.437	.425	.020 Thru .195	.4062	.425	.375
CRES4373□□□A	.4375/- .0014	.515	.503	.020 Thru .220	.4375	.503	.406
CRES4683□□□A	.4687/- .0017	.515	.503	.020 Thru .240	.4687	.503	.437
CRES5623□□□A	.5625/- .0017	.594	.570	.020 Thru .290	.5625	.570	.510

METRIC EXPANSION SIZES

Restrictor Dimensions					Hole Dimensions		
Part Number*	Tolerance						
	+0	+/- .10	+/- .10	+/- .001 (in)	+.10 -0	(Min)	(Max)
	D (mm)	L (mm)	M (mm)	Standard Orifice Size (in)	d (mm)	A (mm)	N (mm)
CRMS0043□□□A	4.00/- .030	4.00	3.70	.020 Thru .050	4.00	3.8	3.3
CRMS0053□□□A	5.00/- .030	5.50	5.20	.020 Thru .075	5.00	5.3	4.3
CRMS0063□□□A	6.00/- .030	6.50	6.20	.020 Thru .100	6.00	6.3	5.3
CRMS0073□□□A	7.00/- .036	7.50	7.20	.020 Thru .130	7.00	7.3	6.2
CRMS0083□□□A	8.00/- .036	8.50	8.20	.020 Thru .150	8.00	8.3	7.2
CRMS0093□□□A	9.00/- .036	10.00	9.70	.020 Thru .170	9.00	9.8	8.2
CRMS0103□□□A	10.00/- .036	11.00	10.70	.020 Thru .195	10.00	10.8	9.2
CRMS0123□□□A	12.00/- .043	13.00	12.70	.020 Thru .240	12.00	12.8	11.0
CRMS0143□□□A	14.00/- .043	15.00	14.40	.020 Thru .280	14.00	14.5	13.0

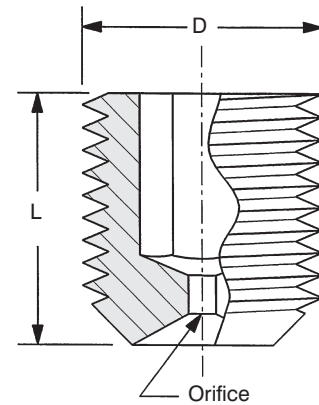
* Complete part number with selected orifice size in inches. Example: CRES2183□116□A defines a .218" Cv Restrictor with .016" orifice.

Cv THREADED RESTRICTORS

STANDARD PART NUMBERS AND SPECIFICATIONS

Cv Threaded Restrictor Design Features:

- Calibrated Orifice
- Stainless Steel or Brass NPT
- Standard Thread Sizes
- Special Flow Testing Available



ENGLISH SCREW THREAD SIZES

Part Number*	Screw Thread Sizes	Standard Orifice Sizes (in)	Nominal D (in)	Nominal L (in)	Hex Key Size (in)
CTES1643□□□A	8-32	.020 Thru .035	.164	3/16	5/64"
CTES1903□□□A	10-32	.020 Thru .050	.190	3/16	3/32"
CTES2503□□□A	1/4"-28	.020 Thru .085	.250	1/4	1/8"
CTES3123□□□A	5/16"-24	.020 Thru .115	.312	5/16	5/32"
CTES3753□□□A	3/8"-24	.020 Thru .145	.375	3/8	3/16"
CTES4373□□□A	7/16"-20	.020 Thru .175	.437	3/8	7/32"
CTES5003□□□A	1/2"-20	.020 Thru .210	.500	1/2	1/4"

METRIC SCREW THREAD SIZES

Part Number*	Screw Thread Sizes (mm)	Standard Orifice Sizes (in)	Nominal D (mm)	Nominal L (mm)	Hex Key Size (mm)
CTMS0043□□□A	4 x .7	.020 Thru .035	4	4	2
CTMS0053□□□A	5 x .8	.020 Thru .055	5	5	2.5
CTMS0063□□□A	6 x 1	.020 Thru .075	6	6	3
CTMS0083□□□A	8 x 1.25	.020 Thru .115	8	8	4
CTMS0103□□□A	10 x 1.5	.020 Thru .155	10	10	5
CTMS0123□□□A	12 x 1.75	.020 Thru .195	12	12	6

NPT PIPE THREAD SIZES

Part Number*	Pipe Thread Sizes	Available Orifice Sizes (in)	Nominal D (in)	L (in)	Hex Key Size (in)
CTPS0622□□□A	1/16"-27 NPT	.020 Thru .115	.312	.250/.235	5/32
CTPS1252□□□A	1/8"-27 NPT	.020 Thru .145	.405	.250/.235	3/16
CTPS2502□□□A	1/4"-18 NPT	.020 Thru .210	.540	.406/.391	1/4
CTPS3752□□□A	3/8"-18 NPT	.020 Thru .270	.675	.406/.391	5/16

* Complete part number with selected orifice size in inches. Example: CTES25030222A defines a 1/4" -28 Cv Restrictor with .022" orifice.

- Notes:
1. Materials: All Cv Restrictor bodies are 303 stainless steel per ASTM A582, with the exception of pipe thread sizes made from brass. Expander pins are 17-4 stainless steel.
 2. Orifice Tolerance: Standard tolerance is +/- .001".
 3. Cv Restrictors can be installed in the fitting you require.
 4. Contact the factory for special materials, flow testing, or other special requirements.

Quality Manufactured in the U.S.A.

Farmington Engineering, Inc. manufactures Cv Restrictors in Connecticut to precise tolerances and production standards. Statistical Process Control (SPC) is used to ensure dimensional consistency.

By maintaining superior quality control standards, Cv Restrictors are a reliable, consistent way to meter the flow of fluid in hydraulic and pneumatic components.

Farmington Engineering employs a staff of highly experienced engineers ready to assist customers. Contact Farmington Engineering for application and technical assistance. Special visits to your facility can be arranged to provide design assistance and technical support to your engineers and manufacturing personnel.



Automatic Flow Test Machine

Other Products Available. . .

- **Cv Expansion Plugs:** Cv Plugs for fluid power, automotive and machine tool industries. Cv Plugs permanently seal holes in manifolds and fluid components with proof pressures up to 45,000 psig. Cv Plugs are available in both English and Metric sizes, with nine different material choices.
- **Solenoid Valves:** Solenoid Valves designed for a wide range of applications, including miniature 2-way or 3-way models, diaphragm valves, pinch valves, and unique inert valves for medical/scientific equipment. Inert plastics, stainless steel, and brass are standard materials. General purpose solenoid valves are made from 1/8" to 3" pipe sizes.

Contact Farmington Engineering for additional information on these products.

Ordering Information:

- Order direct from factory
- Terms: Net 30 days
- F.O.B. Madison, Connecticut USA
- Custom made to order in one week
- Minimum order 12 restrictors
- Packaged in any quantity

Farmington Engineering, Inc.

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203-245-1100 Fax: 203-245-3072

CALL TOLL FREE 1-800-428-7584

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