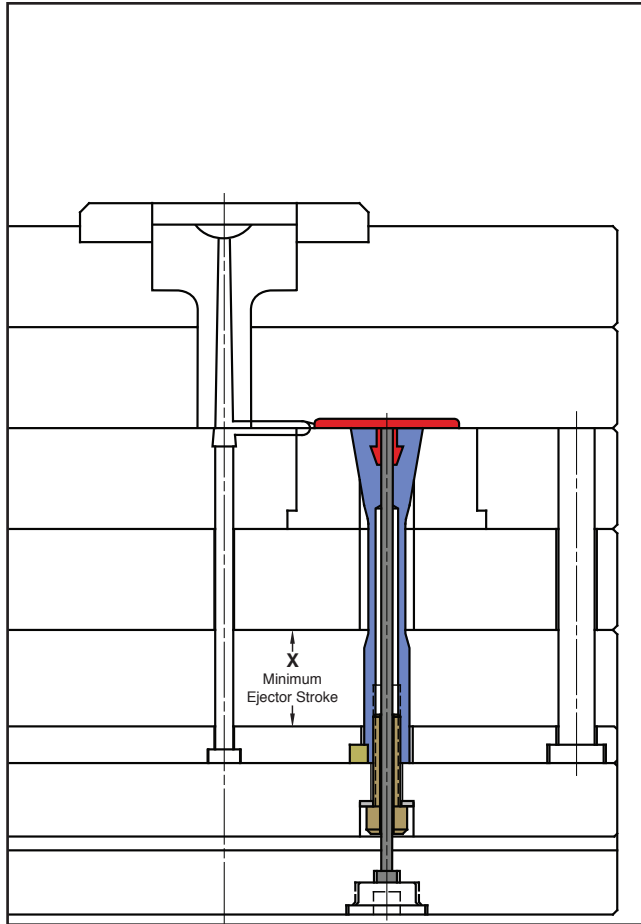


EXPANDABLE CAVITIES

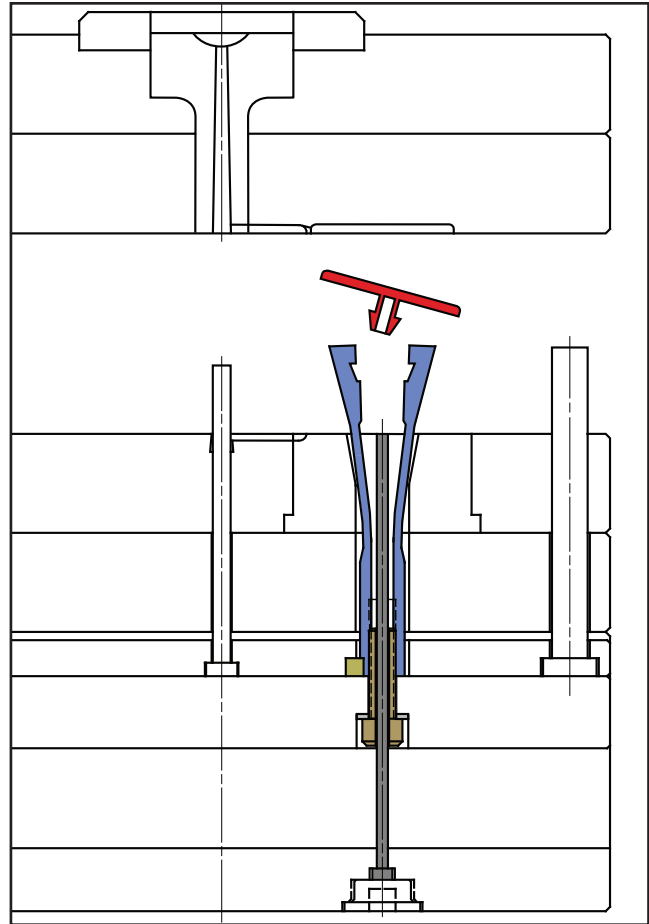
EX-CAV[®] SYSTEM

Expandable Cavities mold undercuts such as threads, dimples, and protrusions. The patented Ex-Cav design eliminates the engineering, maintenance, and machining required for side action mechanisms which results in smaller molds or higher mold cavitation.

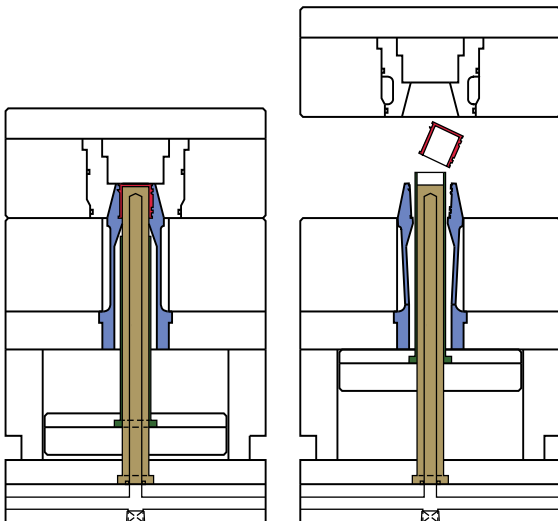
Standard sized Expandable Cavities (Ex-Cavs) are engineered and manufactured for Progressive Components through an alliance with Roehr Tool Solutions.



Mold Closed



Mold Open

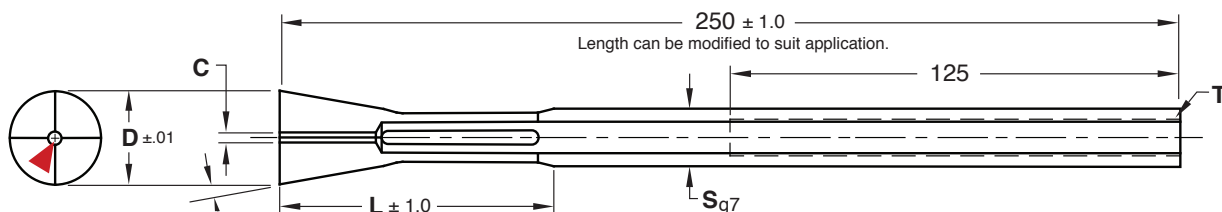
**Technical Information:**

- Four sizes offered to satisfy a wide range of parts.
- The Ex-Cav expands along a conical shape, 10° per side.
- Manufactured from A-2, 54-57 HRC material for repeatable expansion. For optimal performance, the Ex-Cavs should ride against a hardened insert.
- Maximum temperature: 260°C / 500° F
- Expandable Cavities are capable of operating without lubrication.
- However, treating the Ex-Cav with an additional coating for wear reduction or corrosion resistance is beneficial.
- Ex-Cavs can be ordered with molding detail for a 'mold ready' component.
- Fixturing bushings for machining details in house are also available.
- Custom Ex-Cavs are available. Also, when an entire part is formed within the cavity, an A-Series Ex-Cav can be provided, shown at left.



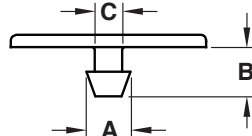
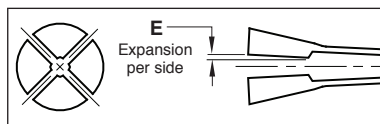
EXPANDABLE CAVITIES

EX-CAV® SYSTEM



M A-2 **H** 54-57 HRC

CAD insertion point



CATALOG NUMBER	D Ex-Cav Diameter	A Maximum Part Diameter -10° per side	B Maximum Molding Length	C Minimum Part Inner Diameter	E Expansion Per Side	F Min. Wall Thickness	L	S Body Diameter	T Thread	X Minimum Ejection Stroke (Prev. page)
EXCAV20	20	14	13	2.5	1.6	3	59	14	M8	15
EXCAV26	26	18	20	3.5	2.5	4	76	16	M10	15
EXCAV38	38	30	27	4.0	3.0	4	89	27	M18	20
EXCAV50	50	40	39	5.5	3.5	5	101	34	M24	20

Mounting kits sold separately below.
Ex-Cav sizes outside of this chart are available as customs.

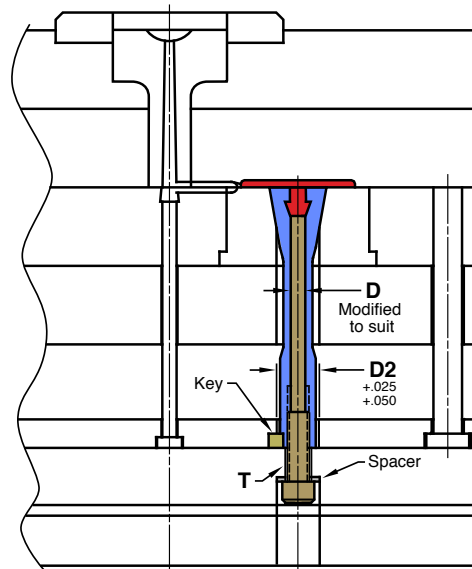
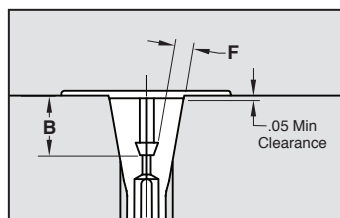
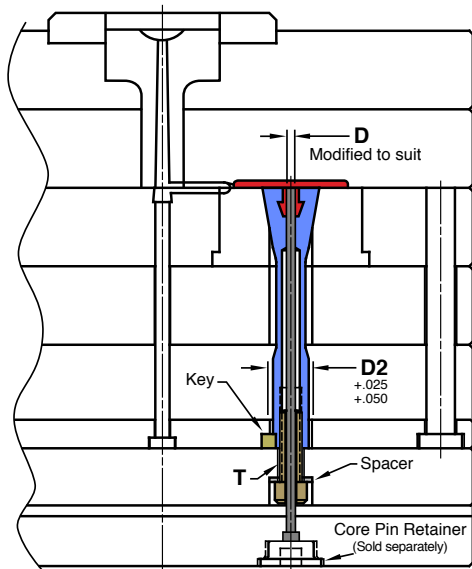
MOUNTING KITS & MACHINING SPECS

Hollow Bolt Mounting Kit Includes:

- Key (7 Thk. x 8 x 40)
- Hollowed Bolt
- Standard DIN H-13 Ejector Pin (400mm Long)
- Spacer

Pin Bolt Mounting Kit Includes:

- Key (7 Thk. x 8 x 40)
- Threaded Bolt/Pin (H-13, 40-44 HRC, 280mm Long)
- Spacer



EX-CAV NUMBER	D Nominal Pin Diameter	T Bolt Size	Spacer Size (IDxODxThk)	D2	HOLLOW BOLT KIT NUMBER
EXCAV20	3.5	M8-1.25 x 40	8x22x4	14	EXC20BH
EXCAV26	4	M10-1.5 x 40	10x23x4	16	EXC26BH
EXCAV38	10	M18-2.5 x 50	19x33x6	27	EXC38BH
EXCAV50	14	M24-3 x 55	25x42x6	34	EXC50BH

EX-CAV NUMBER	D Pin Diam. ± .05	T Bolt Thread	Spacer Size (IDxODxThk)	D2	PIN BOLT KIT NUMBER
EXCAV20	6.0	M8-1.25	8x22x4	14	EXC20BP
EXCAV26	7.7	M10-1.5	10x23x4	16	EXC26BP
EXCAV38	14.5	M18-2.5	19x33x6	27	EXC38BP
EXCAV50	19.8	M24-3	25x42x6	34	EXC50BP

Replacement DIN Ejector Pins are sold on page A-4.
Core Pin Retainers are sold on pg A-19.