Masoneilan

a Baker Hughes business

35002 Series Camflex II

High Capacity Design and 5S Piston Actuator

The **Masoneilan™ Camflex™** 35002 Series was the first eccentric plug valve introduced into the market. This versatile design made history by incorporating the best features of a conventional globe valve using rotary action. Also known as a 'Rotary Globe Valve', Camflex, with its erosive resistant design maintains reliable performance, consistent shut off and precise control. Building upon this legacy, the portfolio is expanding with updated enhancements to make it easier to choose options when sizing a valve for a wider range of applications.

High Capacity Design

Available in 6" up to 16" sizes Class 150/300, the Masoneilan Camflex high capacity valve with split shaft design and 70° rotation allows for higher flow capacity. This rugged construction offers the same value as the standard Camflex, including:

- 10" up to 16" Camflex valve can be modified between standard and High Capacity by replacing the shafts and plug into the body sub-assembly
- Optional ISO-15848-1 certified packing in PTFE and graphite based materials
- · Optional Inconel Shaft for 15-20% higher shut-off
- Optional slurry construction for enhanced performance in highly erosive service
- · Reliable long-term shut-off
- · 100:1 rangeability
- · Less spares than competing valve models

Valve Size (in)	C _V for Standard Camflex	C _V for High Capacity Camflex	
6	500	740	
8	850	1290	
10	1300	1980	
12	1750	2570	
14	2350	4010	
16	3650	5980	

Note: C_V values depicted are Flow To Open (FTO) with full area trim.

Application Versatility

Like the standard Camflex II, the 35002 Series High Capacity valves are designed with the same philosophy by allowing users to select only the options that are necessary. This allows the valve solution to be tailored with standard options to meet the specific requirements of each application. This flexibility ensures that the valve is specified with only the options it requires, avoiding the need for an over-engineered solution with unnecessary features.



Camflex High Capacity Design

High Capacity Actuator Options

Masoneilan actuators, Model 35 diaphragm and Model 5S piston, are designed specifically to work in unison with Camflex High Capacity valves. Rotating 70 degrees, this robust design provides maximum torque output to precisely move the valve to position and maintain set point.

For Camflex High Capacity valves, we offer enhanced actuator options, including:

- · Limit stop
- Handwheel

Model 5S Piston Actuators:

Available with 12" and 16" cylinders, these actuators are designed to meet specific torque requirements for Camflex High Capacity valve sizes 10" up to 16". This single-acting, spring return design features a robust, directly connected linkage and yoke, ensuring reliable performance and precise control.

	Valve Size		10"	12" up to 16"
	Actuator Size		12"	16"
5S Piston Actuator	Range psi (mbar)	ATO ⁽¹⁾	8 - 24 (550 - 1650)	9 – 27 (920 – 1860)
		ATC ⁽²⁾	7 – 23 (480 – 1580)	8 – 26 (550 – 1790)

- Max. supply pressure:
 - 5.17 bar gauge (75 psi) at room temperature
- Air connection: 3/4" NPT
- Standard temperature design: -20°C (-4°F) up to 80°C (176°F)
- 1. Air To Open
- 2. Air To Open

Model 35 Sizes 7 and 9 Diaphragm Actuators:

These actuators have been updated to accommodate the new 70° rotation for Camflex High Capacity and can be specified on valve sizes 6" up to 12".

	Valve Size Actuator Size		6" up to 12"	
			7"	No. 9
35 Diaphragm Actuator	Range psi (mbar)	ATO ⁽¹⁾	7 – 24 (480 – 1680)	8 - 25 (550 - 1700)
		ATC ⁽²⁾		7 – 24 (480 – 1680)

- Max. supply pressure:
 - Type 35: 7 bar gauge (75 psi) at room temperature
 - No. 9: 8 bar gauge (75 psi) at room temperature
- Air connection: 1/4" NPT
- Standard temperature design: -30°C (-22°F) up to 93°C (200°F)
- 1. Air To Open
- 2. Air To Close



Camflex High Capacity Design - sectional view

Please consult your local Baker Hughes sales representative for more options and any additional product information.

