






















# WORCESTER PROCESS VALVE & ACTUATOR PRODUCT GUIDE

Type	Design	Size Range	Pressure Rating	End Connections	Body Materials	Seat Material	Application & Options
 <p><b>13/14</b></p>	Diverter	8-50mm Reduced Bore 15-40mm Full Bore	69 bar T seats 102 bar R seats 55 bar max. upstream sealing on AT/ST	Screwed Butt Weld Socket Weld	Stainless Steel Carbon Steel	Virgin PTFE Filled PTFE Fluorofill Delrin	Can be used for diverting flow or by fitting upstream sealing seats, mixing of two discrete media can be achieved. Mid stroke isolation available with 180° 14 series. Bottom entry as standard with side entry available
 <p><b>A44/59</b></p>	Standard	8-50mm A44 Reduced Bore 15-40mm A59 Full Bore	69 bar T seats 102 bar R seats 207 bar Y seats* *Group II liquids only	Screwed Butt Weld Socket Weld Specials	Stainless Steel Carbon Steel Brass Exotics	Virgin PTFE Filled PTFE Fluorofill Delrin PEEK Metal	Reduced and full bore valve which has been adopted as the industry standard. It can be used on an extensive variety of applications with many special build options available
 <p><b>A459/599</b></p>	Standard	65-150mm A459 Reduced bore 50mm-100mm A599 Full Bore	50 bar	Screwed Butt Weld Socket Weld	Stainless Steel Carbon Steel (Note - Carbon steel valve suitable for use at -46°C as standard)	Virgin PTFE Filled PTFE Fluorofill Delrin PEEK Metal	The A459/599 valve extends the size range of the A44/59 product up to 150mm
 <p><b>AW44/59</b></p>	Steam	8-50mm AW44 Reduced Bore 15-40mm AW59 Full Bore	21 bar saturated steam 90 bar non steam	Screwed Butt Weld Socket Weld	Stainless Steel Carbon Steel	Fluorofill PEEK Metal	Designed for on/off steam applications up to 21 bar on saturated steam. The valve is also ideal for thermal fluid applications up to 280°C depending on seat material
 <p><b>C44/59</b></p>	Cryogenic	8-50mm C44 Reduced Bore 15-40mm C59 Full Bore	69 bar	Screwed Butt Weld Socket Weld	Stainless Steel Brass	Fluorofill	Designed for use on cryogenic medias such as Oxygen, Nitrogen, Argon, Natural Gas and Carbon Dioxide. All valves are supplied cleaned for Oxygen service
 <p><b>E44/59</b></p>	Enviro-Safe	8-50mm E44 Reduced Bore 15-40mm E59 Full Bore	69 bar T seats 102 bar R seats	Screwed Butt Weld Socket Weld	Stainless Steel Carbon Steel	Virgin PTFE Filled PTFE Fluorofill Delrin PEEK Metal	The Enviro-Safe valve features a unique dual stem sealing arrangement which ensures high integrity combined with long life. Ideally suited for toxic media such as phosgene, chlorine and high cycling applications
 <p><b>F44/59</b></p>	Firesafe	8-50mm F44 Reduced Bore 15-40mm F59 Full Bore	69 bar T seats 102 bar R seats	Screwed Butt Weld Socket Weld	Stainless Steel Carbon Steel	Virgin PTFE Filled PTFE Fluorofill	Suitable for hazardous areas in hydrocarbon and chemical lines. The F44 is anti-static and fire tested to EN 10497
 <p><b>WK44/70/74</b></p>	High Purity	8-50mm WK44 Reduced Bore 15-50mm WK70 True Bore	69 bar	Butt weld Tri clamp RTJ ISS IDF	Stainless Steel	Virgin PTFE Filled PTFE Fluorofill	Designed for high purity applications. Electro-polished as standard with 0.1µm option available. Cavity filler seats also available to minimise media build up and purge ports for CIP and SIP can also be accommodated
 <p><b>3HP44/5HP44</b></p>	High Pressure	8-50mm Reduced Bore	345 bar	Screwed Butt Weld Socket Weld	Stainless Steel Carbon Steel	Delrin PEEK	The 5HP44 can be used for group II media liquids up to 345 bar. High pressure gas up to 207 bar can be accommodated using a 3HP44
 <p><b>V44/459</b></p>	Control	8-80mm Reduced Bore	Based upon seat and valve type	Screwed Butt Weld Socket Weld	Stainless Steel Carbon Steel	Stainless Steel Hastelloy Monel	The Worcester V seat can be fitted into most versions of the 44/459 to provide control on a wide range of applications

# WORCESTER PROCESS VALVE & ACTUATOR PRODUCT GUIDE



Type	Design	Size Range	Pressure Rating	End Connections	Body Materials	Seat Material	Application & Options
 <b>B18/19</b>	Multi-Way	15-150mm B18 - Full Bore 20-200mm 18 - Reduced Bore	19 bar (Class 150) 50 bar (Class 300) 16 bar (PN16) 40 bar (PN40)	ANSI Class 150 ANSI Class 300 Metric PN16 Metric PN40	Stainless Steel Carbon Steel Exotics	Virgin PTFE Filled PTFE Fluorofill	Allows media diversion through a number of flow paths with up to 5 flange connections. Flange ratings and face to face lengths are optional with flexible installation through loose hub slip flanges. Available as 3-Piece valve with screwed or welded connection
 <b>F519/529</b>	ANSI	15-40mm Full Bore	19 bar (Class 150) 50 bar (Class 300) 16 bar (PN16) 40 bar (PN40)	ANSI Class 150 (519) ANSI Class 300 (529) Metric PN16 Metric PN40	Stainless Steel Carbon Steel Exotics	Virgin PTFE Filled PTFE Fluorofill PEEK	Flanged valve with third party approval to BS5351 with fire test certification to EN 10497. 15 to 40mm valves are supplied full bore as standard
 <b>F51/52</b>	ANSI Reduced	15-200mm Reduced Bore	19 bar (Class 150) 50 bar (Class 300) 16 bar (PN16) 40 bar (PN40)	ANSI Class 150 (51) ANSI Class 300 (52) Metric PN16 Metric PN40	Stainless Steel Carbon Steel Exotics	Virgin PTFE Filled PTFE Fluorofill PEEK	Reduced Bore flanged valve with third party approval to BS5351 with fire test certification to EN 10497. Also available as cryogenic C51/52
 <b>E51/52</b>	Enviro-Safe	15-200mm Reduced Bore	19 bar (Class 150) 50 bar (Class 300) 16 bar (PN16) 40 bar (PN40)	ANSI Class 150 (E51) ANSI Class 300 (E52) Metric PN16 Metric PN40	Stainless Steel Carbon Steel (Note - Carbon steel valve suitable for use at -46°C as standard)	Virgin PTFE Filled PTFE Fluorofill PEEK	The Enviro-Safe valve features a unique dual sealing stem arrangement which ensures high integrity combined with long life. Ideally suited for toxic media such as phosgene and chlorine. Fire safe version available as EF51/52
 <b>F53/54</b>	DIN Reduced	15-250mm Reduced Bore	10 bar 16 bar 25 bar 40 bar	Metric PN10 Metric PN16 Metric PN25 Metric PN40	Stainless Steel Carbon Steel	Virgin PTFE Filled PTFE Fluorofill PEEK	Designed for use on the majority of hydrocarbon and chemical lines. The F53 meets DIN 3202 Col.F4 face to face with the F54 meeting Col.F1
 <b>F55</b>	ANSI Reduced	65-200mm Reduced Bore	19 bar	ANSI Class 150	Stainless Steel Carbon Steel	Virgin PTFE Filled PTFE Fluorofill PEEK	2-Piece Reduced Bore flanged valve
 <b>F819/829</b>	ANSI Full	50-200mm Full Bore	19 bar (Class 150) 50 bar (Class 300) 16 bar (PN16) 40 bar (PN40)	ANSI Class 150 ANSI Class 300 Metric PN16 Metric PN40	Stainless Steel Carbon Steel	Virgin PTFE Filled PTFE Fluorofill PEEK	Full Bore flanged valve with third party approval to BS5351 with fire test certification to EN 10497
 <b>V51/524</b>	Control	15-100mm	19 bar (Class 150) 50 bar (Class 300) 16 bar (PN16) 40 bar (PN40)	ANSI Class 150 ANSI Class 300 Metric PN16 Metric PN40	Stainless Steel Carbon Steel	Stainless Steel Hastelloy Monel	The Worcester V seat can be fitted into most versions of the reduced bore flanged valve to provide control on a wide range of applications
Type	Design	Torque Range	Supply Pressure / Voltage	Temperature Range	Travel Stops	Design Options	Application & Options
 <b>40R</b>	Rack & Pinion	11 to 4617 Nm at 5.5 bar	Up to 8.3 bar	-50 Deg C to +150 Deg C	Optional	Fast acting	High performance quality actuator combining reliability, long life and ease of maintenance with operational safety
 <b>33R SERIES</b>	180°	96 to 2309 Nm at 5.5 bar	Up to 8.3 bar	-50 Deg C to +150 Deg C	Optional	90° stop position 120° rotation	180° actuator using standard Norbro 40R series design concept for use on diverter valves. 120° option also available
 <b>SUPERNOVA</b>	Rack & Pinion	17 to 3441 Nm at 5.5 bar	Up to 8.0 bar	-50 Deg C to +150 Deg C	Standard	180° option	Aluminium rack and pinion actuator with integral limit stops as standard allowing for open and closed position adjustment