

# Specification Sheet

<p>No.: 1 QTY: 1</p> <p>Tag no. 101FV-0116</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 50</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS440C</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																	
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# Specification Sheet

<p>No.: 2 QTY: 1</p> <p>Tag no. 101FV-0208</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 3 inch</p> <p>Port size 3 inch</p> <p>Rated Cv 110</p> <p>Connection size inch</p> <p>Body rating ANSI600</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 3 QTY: 1</p> <p>Tag no. 101LV-0306</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 50</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 4 QTY: 1</p> <p>Tag no. 101TV-0403</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 5 inch</p> <p>Rated Cv 261</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 5 QTY: 1</p> <p>Tag no. 101LV-0501</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 6 QTY: 1</p> <p>Tag no. 101TV-0508</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=1.0 inch</p> <p>Rated Cv 1.0</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS440C</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																												
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# Specification Sheet

<p>No.: 7 QTY: 1</p> <p>Tag no. 101FV-0509</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ADVB</p> <p>Description Top and Bottom Guided Double-Seat Control Valve</p> <p>Valve size 6 inch</p> <p>Port size 6 inch</p> <p>Rated Cv 450</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)+V563(PTFE)+V6590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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Shut-off press.		8.5		bar																																																																					
Temperature	182	182	182	degC																																																																					
Sp.Gr. (liq.)				kg/m3																																																																					
Sp.Gr.(gas,vapor)				MW																																																																					
Viscosity				cP																																																																					
Flash				%																																																																					
Calculated Cv	306.8	306.8	78.97																																																																						
Design press.	8.5	barG																																																																							
Design temp.	225	degC																																																																							
Line size in/out	6 /	6 inch																																																																							
Line Sch. / Thick	40 /	7.1 mm																																																																							

# Specification Sheet

<p>No.: 8 QTY: 1</p> <p>Tag no. 101LV-0603</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=6.3 inch</p> <p>Rated Cv 6.3</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																						
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: center;">LIQUID</th> <th style="text-align: center;">NOR</th> <th style="text-align: center;">MIN</th> <th style="text-align: center;">[ LIQUID ]</th> <th style="text-align: center;">UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td style="text-align: center;">2475</td> <td style="text-align: center;">962</td> <td style="text-align: center;">571</td> <td></td> <td style="text-align: center;">kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td style="text-align: center;">4.4</td> <td style="text-align: center;">4.6</td> <td style="text-align: center;">4.7</td> <td></td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Diff. pressure</td> <td style="text-align: center;">0.8</td> <td style="text-align: center;">1.3</td> <td style="text-align: center;">1.5</td> <td></td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td style="text-align: center;">4.3</td> <td></td> <td></td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Temperature</td> <td style="text-align: center;">49</td> <td style="text-align: center;">49</td> <td style="text-align: center;">49</td> <td></td> <td style="text-align: center;">degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td style="text-align: center;">988</td> <td style="text-align: center;">988</td> <td style="text-align: center;">988</td> <td></td> <td style="text-align: center;">kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">%</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Calculated Cv</td> <td style="width: 20%; text-align: center;">3.218</td> <td style="width: 20%; text-align: center;">0.9813</td> <td style="width: 20%; text-align: center;">0.5422</td> </tr> </table>	Fluid name	LIQUID	NOR	MIN	[ LIQUID ]	UNIT	Flow rate	2475	962	571		kg/h	Inlet pressure	4.4	4.6	4.7		barG	Outlet pressure					barG	Diff. pressure	0.8	1.3	1.5		bar	Shut-off press.		4.3			bar	Temperature	49	49	49		degC	Sp.Gr. (liq.)	988	988	988		kg/m3	Sp.Gr.(gas,vapor)					MW	Viscosity					cP	Flash					%	Calculated Cv	3.218	0.9813	0.5422	<p><b>&lt;Seat Leakage&gt;</b></p> <p style="text-align: center;">CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;">Design press.</td> <td style="width: 20%; text-align: center;">7.5</td> <td style="width: 20%;"></td> <td style="width: 20%; text-align: right;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: center;">96</td> <td></td> <td style="text-align: right;">degC</td> </tr> <tr> <td>Line size in/out</td> <td></td> <td style="text-align: center;">//</td> <td style="text-align: right;">2 inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: center;">40</td> <td style="text-align: center;">//</td> <td style="text-align: right;">3.9 mm</td> </tr> </table>	Design press.	7.5		barG	Design temp.	96		degC	Line size in/out		//	2 inch	Line Sch. / Thick	40	//	3.9 mm
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# Specification Sheet

<p>No.: 9 QTY: 1</p> <p>Tag no. 101PV-0605</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ADVB</p> <p>Description Top and Bottom Guided Double-Seat Control Valve</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 705</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA4</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)+V563(PTFE)+V6590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 10 QTY: 1</p> <p>Tag no. 101FV-0806</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 179</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																
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# Specification Sheet

<p>No.: 11 QTY: 1</p> <p>Tag no. 101HV-0907</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 12 QTY: 1</p> <p>Tag no. 101HV-0908</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
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# Specification Sheet

<p>No.: 14 QTY: 1</p> <p>Tag no. 101HV-0911</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=14 inch</p> <p>Rated Cv 14</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
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# Specification Sheet

<p>No.: 15 QTY: 1</p> <p>Tag no. 102LV-0101</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 4 inch</p> <p>Port size 3 inch</p> <p>Rated Cv 103</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA2</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																			
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Sp.Gr.(gas,vapor)				MW																																																																
Viscosity				cP																																																																
Flash				%																																																																
Design press.	18.8	barG																																																																		
Design temp.	80	degC																																																																		
Line size in/out	8	inch																																																																		
Line Sch. / Thick	20 / 6.4	mm																																																																		

# Specification Sheet

<p>No.: 16 QTY: 1</p> <p>Tag no. 102PV-0106</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ADVB</p> <p>Description Top and Bottom Guided Double-Seat Control Valve</p> <p>Valve size 10 inch</p> <p>Port size 10 inch</p> <p>Rated Cv 1100</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA4</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)+V563(PTFE)+V6590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Fluid name</td> <td style="width: 20%;">PROPANE VAPOUR</td> <td style="width: 10%;">[</td> <td style="width: 10%;">GAS</td> <td style="width: 10%;">]</td> </tr> <tr> <td></td> <td>MAX NOR</td> <td>MIN</td> <td>UNIT</td> <td></td> </tr> <tr> <td>Flow rate</td> <td>70156</td> <td>55679</td> <td>kg/h</td> <td></td> </tr> <tr> <td>Inlet pressure</td> <td>7.1</td> <td>7.4</td> <td>barG</td> <td></td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td>barG</td> <td></td> </tr> <tr> <td>Diff. pressure</td> <td>3</td> <td>3.2</td> <td>bar</td> <td></td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td>11.4</td> <td>bar</td> <td></td> </tr> <tr> <td>Temperature</td> <td>20</td> <td>20</td> <td>degC</td> <td></td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td></td> <td></td> <td>kg/m3</td> <td></td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td>44.1</td> <td>44.1</td> <td>MW</td> <td></td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td>cP</td> <td></td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td>%</td> <td></td> </tr> </table> <p>Calculated Cv 431.4 326.6</p>	Fluid name	PROPANE VAPOUR	[	GAS	]		MAX NOR	MIN	UNIT		Flow rate	70156	55679	kg/h		Inlet pressure	7.1	7.4	barG		Outlet pressure			barG		Diff. pressure	3	3.2	bar		Shut-off press.		11.4	bar		Temperature	20	20	degC		Sp.Gr. (liq.)			kg/m3		Sp.Gr.(gas,vapor)	44.1	44.1	MW		Viscosity			cP		Flash			%		<p><b>&lt;Seat Leakage&gt;</b></p> <p>CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Design press.</td> <td style="width: 30%;">11.4</td> <td style="width: 10%;"></td> <td style="width: 10%;">barG</td> </tr> <tr> <td>Design temp.</td> <td>65</td> <td></td> <td>degC</td> </tr> <tr> <td>Line size in/out</td> <td></td> <td>/</td> <td>14 inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td>40</td> <td>/</td> <td>11.3 mm</td> </tr> </table>	Design press.	11.4		barG	Design temp.	65		degC	Line size in/out		/	14 inch	Line Sch. / Thick	40	/	11.3 mm
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# Specification Sheet

<p>No.: 17 QTY: 1</p> <p>Tag no. 102FV-0304</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 6 inch</p> <p>Rated Cv 322</p> <p>Connection size inch</p> <p>Body rating ANSI600</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator SIDE</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th colspan="3">DRY GAS</th> <th>[ GAS ]</th> </tr> <tr> <th></th> <th>MAX</th> <th>NOR</th> <th>MIN</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td>36506</td> <td>36506</td> <td>18253</td> <td>kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td>56.2</td> <td>58.8</td> <td>58.9</td> <td>barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Diff. pressure</td> <td>1</td> <td>4.2</td> <td>4.1</td> <td>bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td>17</td> <td></td> <td>bar</td> </tr> <tr> <td>Temperature</td> <td>23</td> <td>23</td> <td>23</td> <td>degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td></td> <td></td> <td></td> <td>kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td>17.2</td> <td>17.2</td> <td>17.2</td> <td>MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td>cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td>%</td> </tr> <tr> <td>Calculated Cv</td> <td>213.7</td> <td>103.4</td> <td>52.24</td> <td></td> </tr> </tbody> </table>	Fluid name	DRY GAS			[ GAS ]		MAX	NOR	MIN	UNIT	Flow rate	36506	36506	18253	kg/h	Inlet pressure	56.2	58.8	58.9	barG	Outlet pressure				barG	Diff. pressure	1	4.2	4.1	bar	Shut-off press.		17		bar	Temperature	23	23	23	degC	Sp.Gr. (liq.)				kg/m3	Sp.Gr.(gas,vapor)	17.2	17.2	17.2	MW	Viscosity				cP	Flash				%	Calculated Cv	213.7	103.4	52.24		<p><b>&lt;Seat Leakage&gt;</b></p> <p>CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td>67</td> <td>barG</td> </tr> <tr> <td>Design temp.</td> <td>65</td> <td>degC</td> </tr> <tr> <td>Line size in/out</td> <td>10</td> <td>inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td>80 / 15.1</td> <td>mm</td> </tr> </table>	Design press.	67	barG	Design temp.	65	degC	Line size in/out	10	inch	Line Sch. / Thick	80 / 15.1	mm
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# Specification Sheet

<p>No.: 18 QTY: 1</p> <p>Tag no. 102LV-0603</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=14 inch</p> <p>Rated Cv 14</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: center;">WATER</th> <th colspan="3" style="text-align: center;">[ WATER ]</th> </tr> <tr> <th></th> <th style="text-align: center;">MAX</th> <th style="text-align: center;">NOR</th> <th style="text-align: center;">MIN</th> <th style="text-align: center;">UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td style="text-align: center;">2139</td> <td style="text-align: center;">713</td> <td style="text-align: center;">213.9</td> <td style="text-align: center;">kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td style="text-align: center;">0.2</td> <td style="text-align: center;">0.2</td> <td style="text-align: center;">0.2</td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Diff. pressure</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td style="text-align: center;">6</td> <td></td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Temperature</td> <td style="text-align: center;">45</td> <td style="text-align: center;">45</td> <td style="text-align: center;">45</td> <td style="text-align: center;">degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td style="text-align: center;">990.3</td> <td style="text-align: center;">990.3</td> <td style="text-align: center;">990.3</td> <td style="text-align: center;">kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td style="text-align: center;">MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td style="text-align: center;">cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td style="text-align: center;">%</td> </tr> </tbody> </table> <p>Calculated Cv 7.858 2.619 0.7858</p>	Fluid name	WATER	[ WATER ]				MAX	NOR	MIN	UNIT	Flow rate	2139	713	213.9	kg/h	Inlet pressure	0.2	0.2	0.2	barG	Outlet pressure				barG	Diff. pressure	0.1	0.1	0.1	bar	Shut-off press.		6		bar	Temperature	45	45	45	degC	Sp.Gr. (liq.)	990.3	990.3	990.3	kg/m3	Sp.Gr.(gas,vapor)				MW	Viscosity				cP	Flash				%	<p><b>&lt;Seat Leakage&gt;</b></p> <p style="text-align: center;">CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td style="text-align: center;">6</td> <td style="text-align: right;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: center;">80</td> <td style="text-align: right;">degC</td> </tr> <tr> <td>Line size in/out</td> <td style="text-align: center;">2</td> <td style="text-align: right;">inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: center;">40 / 3.9</td> <td style="text-align: right;">mm</td> </tr> </table>	Design press.	6	barG	Design temp.	80	degC	Line size in/out	2	inch	Line Sch. / Thick	40 / 3.9	mm
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# Specification Sheet

<p>No.: 19 QTY: 1</p> <p>Tag no. 104LV-0104</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model VDC</p> <p>Description Cage Type Double Seated Control Valve</p> <p>Valve size 10 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 640</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator VA5</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYL-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 20 QTY: 1</p> <p>Tag no. 104LV-0108</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 8 inch</p> <p>Port size 5 inch</p> <p>Rated Cv 275</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 21 QTY: 1</p> <p>Tag no. 104FV-0311</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 6 inch</p> <p>Rated Cv 322</p> <p>Connection size inch</p> <p>Body rating ANSI600</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type DOUBLE (EXT-2W)</p> <p>Actuator HA3</p> <p>Manual operator SIDE</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																			
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<p>No.: 22 QTY: 1</p> <p>Tag no. 104FV-0312</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 56</p> <p>Connection size inch</p> <p>Body rating ANSI600</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																														
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Line Sch. / Thick	40S	//	mm																																																																																												

# Specification Sheet

<p>No.: 23 QTY: 1</p> <p>Tag no. 104FV-0325</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 56</p> <p>Connection size inch</p> <p>Body rating ANSI600</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 24 QTY: 1</p> <p>Tag no. 104HV-0329</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 2 inch</p> <p>Port size 1-1/2 inch</p> <p>Rated Cv 31</p> <p>Connection size inch</p> <p>Body rating ANSI600</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																														
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# Specification Sheet

<p>No.: 25 QTY: 1</p> <p>Tag no. 104TV-0401</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 6 inch</p> <p>Port size 5 inch</p> <p>Rated Cv 275</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
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# Specification Sheet

<p>No.: 26 QTY: 1</p> <p>Tag no. 104PV-0150</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCN</p> <p>Description Compressible Fluid Service Low-Noise Cage Type Control Valves</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 580</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic LINEAR</p> <p>Bonnet type PLAIN</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: center;">HC VAPOR</th> <th style="text-align: center;">NOR</th> <th style="text-align: center;">MIN</th> <th style="text-align: center;">UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td style="text-align: center;">31864</td> <td style="text-align: center;">31864</td> <td style="text-align: center;">7966</td> <td style="text-align: center;">kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td style="text-align: center;">8.4</td> <td style="text-align: center;">8.4</td> <td style="text-align: center;">8.4</td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Diff. pressure</td> <td style="text-align: center;">2.4</td> <td style="text-align: center;">2.4</td> <td style="text-align: center;">2.4</td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td style="text-align: center;">10.4</td> <td></td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Temperature</td> <td style="text-align: center;">60</td> <td style="text-align: center;">60</td> <td style="text-align: center;">60</td> <td style="text-align: center;">degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td></td> <td></td> <td></td> <td style="text-align: center;">kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td style="text-align: center;">18.28</td> <td style="text-align: center;">18.28</td> <td style="text-align: center;">18.28</td> <td style="text-align: center;">MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td style="text-align: center;">cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td style="text-align: center;">%</td> </tr> <tr> <td>Calculated Cv</td> <td style="text-align: center;">325.5</td> <td style="text-align: center;">325.5</td> <td style="text-align: center;">81.37</td> <td></td> </tr> </tbody> </table>	Fluid name	HC VAPOR	NOR	MIN	UNIT	Flow rate	31864	31864	7966	kg/h	Inlet pressure	8.4	8.4	8.4	barG	Outlet pressure				barG	Diff. pressure	2.4	2.4	2.4	bar	Shut-off press.		10.4		bar	Temperature	60	60	60	degC	Sp.Gr. (liq.)				kg/m3	Sp.Gr.(gas,vapor)	18.28	18.28	18.28	MW	Viscosity				cP	Flash				%	Calculated Cv	325.5	325.5	81.37		<p><b>&lt;Seat Leakage&gt;</b></p> <p style="text-align: center;">CLASS VI (SV0201-008)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td style="text-align: center;">10.4</td> <td style="text-align: right;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: center;">91</td> <td style="text-align: right;">degC</td> </tr> <tr> <td>Line size in/out</td> <td style="text-align: center;">12</td> <td style="text-align: right;">inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: center;">20 / 6.4</td> <td style="text-align: right;">mm</td> </tr> </table>	Design press.	10.4	barG	Design temp.	91	degC	Line size in/out	12	inch	Line Sch. / Thick	20 / 6.4	mm
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# Specification Sheet

<p>No.: 27 QTY: 1</p> <p>Tag no. 104TV-0213</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 4 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 200</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS440C</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																			
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# Specification Sheet

<p>No.: 28 QTY: 1</p> <p>Tag no. 105TV-0206</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 6 inch</p> <p>Rated Cv 322</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																			
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# Specification Sheet

<p>No.: 29 QTY: 1</p> <p>Tag no. 105FV-0210</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/2 inch</p> <p>Rated Cv 24</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: center;">HC LIQUID</th> <th style="text-align: center;">NOR</th> <th style="text-align: center;">MIN</th> <th style="text-align: center;">LIQUID ]</th> </tr> <tr> <th></th> <th style="text-align: center;">MAX</th> <th></th> <th></th> <th style="text-align: center;">UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td style="text-align: center;">20503</td> <td style="text-align: center;">20503</td> <td style="text-align: center;">3076</td> <td style="text-align: center;">kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td style="text-align: center;">29.2</td> <td style="text-align: center;">29.2</td> <td style="text-align: center;">29.2</td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Diff. pressure</td> <td style="text-align: center;">15.4</td> <td style="text-align: center;">15.4</td> <td style="text-align: center;">15.4</td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td style="text-align: center;">32.5</td> <td></td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Temperature</td> <td style="text-align: center;">104</td> <td style="text-align: center;">104</td> <td style="text-align: center;">104</td> <td style="text-align: center;">degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td style="text-align: center;">396</td> <td style="text-align: center;">396</td> <td style="text-align: center;">396</td> <td style="text-align: center;">kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td style="text-align: center;">MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td style="text-align: center;">cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td style="text-align: center;">%</td> </tr> <tr> <td>Calculated Cv</td> <td style="text-align: center;">9.598</td> <td style="text-align: center;">9.598</td> <td style="text-align: center;">1.44</td> <td></td> </tr> </tbody> </table>	Fluid name	HC LIQUID	NOR	MIN	LIQUID ]		MAX			UNIT	Flow rate	20503	20503	3076	kg/h	Inlet pressure	29.2	29.2	29.2	barG	Outlet pressure				barG	Diff. pressure	15.4	15.4	15.4	bar	Shut-off press.		32.5		bar	Temperature	104	104	104	degC	Sp.Gr. (liq.)	396	396	396	kg/m3	Sp.Gr.(gas,vapor)				MW	Viscosity				cP	Flash				%	Calculated Cv	9.598	9.598	1.44		<p><b>&lt;Seat Leakage&gt;</b></p> <p style="text-align: center;">CLASS VI (SV0201-008)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td style="text-align: center;">32.5</td> <td style="text-align: right;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: center;">-39</td> <td style="text-align: right;">degC</td> </tr> <tr> <td>Line size in/out</td> <td style="text-align: center;">2 /</td> <td style="text-align: right;">2 inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: center;">40 /</td> <td style="text-align: right;">mm</td> </tr> </table>	Design press.	32.5	barG	Design temp.	-39	degC	Line size in/out	2 /	2 inch	Line Sch. / Thick	40 /	mm
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# Specification Sheet

<p>No.: 30 QTY: 1</p> <p>Tag no. 105PV-0301</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCN</p> <p>Description Compressible Fluid Service Low-Noise Cage Type Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 2-1/2 inch</p> <p>Rated Cv 68</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic LINEAR</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																														
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# Specification Sheet

<p>No.: 31 QTY: 1</p> <p>Tag no. 105LV-0307</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 2-1/2 inch</p> <p>Rated Cv 68</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 32 QTY: 1</p> <p>Tag no. 105FV-0309</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 50</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA3</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 33 QTY: 1</p> <p>Tag no. 105FV-0310</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HLS</p> <p>Description Small-Port Single Seated Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS304L STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V544(SUS304L)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYA-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																												
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# Specification Sheet

<p>No.: 34 QTY: 1</p> <p>Tag no. 105FV-0315</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HLS</p> <p>Description Small-Port Single Seated Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS304L STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V544(SUS304L)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 35 QTY: 1</p> <p>Tag no. 105FV-0316</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HLS</p> <p>Description Small-Port Single Seated Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS304L STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V544(SUS304L)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: center;">ETHANE LIQUID</th> <th style="text-align: center;">LIQUID</th> <th style="text-align: center;">[ LIQUID ]</th> <th style="text-align: center;">UNIT</th> </tr> <tr> <th></th> <th style="text-align: center;">MAX</th> <th style="text-align: center;">NOR</th> <th style="text-align: center;">MIN</th> <th></th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td style="text-align: center;">3875</td> <td style="text-align: center;">3875</td> <td style="text-align: center;">736</td> <td style="text-align: center;">kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td style="text-align: center;">24.8</td> <td style="text-align: center;">24.8</td> <td style="text-align: center;">25.2</td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Diff. pressure</td> <td style="text-align: center;">4</td> <td style="text-align: center;">4</td> <td style="text-align: center;">0.25</td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td style="text-align: center;">29.5</td> <td></td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Temperature</td> <td style="text-align: center;">-10.3</td> <td style="text-align: center;">-10.3</td> <td style="text-align: center;">-10.3</td> <td style="text-align: center;">degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td style="text-align: center;">436</td> <td style="text-align: center;">436</td> <td style="text-align: center;">436</td> <td style="text-align: center;">kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td style="text-align: center;">MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td style="text-align: center;">cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td style="text-align: center;">%</td> </tr> <tr> <td>Calculated Cv</td> <td style="text-align: center;">3.392</td> <td style="text-align: center;">3.392</td> <td style="text-align: center;">2.577</td> <td></td> </tr> </tbody> </table>	Fluid name	ETHANE LIQUID	LIQUID	[ LIQUID ]	UNIT		MAX	NOR	MIN		Flow rate	3875	3875	736	kg/h	Inlet pressure	24.8	24.8	25.2	barG	Outlet pressure				barG	Diff. pressure	4	4	0.25	bar	Shut-off press.		29.5		bar	Temperature	-10.3	-10.3	-10.3	degC	Sp.Gr. (liq.)	436	436	436	kg/m3	Sp.Gr.(gas,vapor)				MW	Viscosity				cP	Flash				%	Calculated Cv	3.392	3.392	2.577		<p><b>&lt;Seat Leakage&gt;</b></p> <p style="text-align: center;">CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td style="text-align: center;">29.5</td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: center;">-37</td> <td style="text-align: center;">degC</td> </tr> <tr> <td>Line size in/out</td> <td style="text-align: center;">1 / 1</td> <td style="text-align: center;">inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: center;">40 /</td> <td style="text-align: center;">mm</td> </tr> </table>	Design press.	29.5	barG	Design temp.	-37	degC	Line size in/out	1 / 1	inch	Line Sch. / Thick	40 /	mm
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# Specification Sheet

<p>No.: 36 QTY: 1</p> <p>Tag no. 105FV-0405</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/2 inch</p> <p>Rated Cv 30</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA2</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 37 QTY: 1</p> <p>Tag no. 105TV-0407</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 4 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 200</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing</p> <p>Gasket</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 38 QTY: 1</p> <p>Tag no. 105FV-0411</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/4 inch</p> <p>Rated Cv 21</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 39 QTY: 1</p> <p>Tag no. 105PV-0501A</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 50</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																
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<p>No.: 40 QTY: 1</p> <p>Tag no. 105PV-0501B</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 2-1/2 inch</p> <p>Rated Cv 85</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																		
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# Specification Sheet

<p>No.: 41 QTY: 1</p> <p>Tag no. 105FV-0505</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/2 inch</p> <p>Rated Cv 24</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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<p>No.: 42 QTY: 1</p> <p>Tag no. 105FV0508</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1-1/2 inch</p> <p>Port size 1-1/4 inch</p> <p>Rated Cv 21</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																												
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<p>No.: 43 QTY: 1</p> <p>Tag no. 105FV-0510</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=8.0 inch</p> <p>Rated Cv 8.0</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 44 QTY: 1</p> <p>Tag no. 105FV-0605</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/4 inch</p> <p>Rated Cv 21</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th colspan="3">BUTANE LIQUID</th> <th>[ LIQUID ]</th> </tr> <tr> <th></th> <th>MAX</th> <th>NOR</th> <th>MIN</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td>6534</td> <td>6534</td> <td>2810</td> <td>kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td>7.05</td> <td>7.05</td> <td>7.07</td> <td>barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Diff. pressure</td> <td>0.95</td> <td>0.95</td> <td>0.94</td> <td>bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td>9.1</td> <td></td> <td>bar</td> </tr> <tr> <td>Temperature</td> <td>50</td> <td>50</td> <td>50</td> <td>degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td>536</td> <td>536</td> <td>536</td> <td>kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td>MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td>cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td>%</td> </tr> <tr> <td>Calculated Cv</td> <td>10.59</td> <td>10.59</td> <td>4.576</td> <td></td> </tr> </tbody> </table>	Fluid name	BUTANE LIQUID			[ LIQUID ]		MAX	NOR	MIN	UNIT	Flow rate	6534	6534	2810	kg/h	Inlet pressure	7.05	7.05	7.07	barG	Outlet pressure				barG	Diff. pressure	0.95	0.95	0.94	bar	Shut-off press.		9.1		bar	Temperature	50	50	50	degC	Sp.Gr. (liq.)	536	536	536	kg/m3	Sp.Gr.(gas,vapor)				MW	Viscosity				cP	Flash				%	Calculated Cv	10.59	10.59	4.576		<p><b>&lt;Seat Leakage&gt;</b></p> <p>CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td>14.1</td> <td>barG</td> </tr> <tr> <td>Design temp.</td> <td>-10</td> <td>degC</td> </tr> <tr> <td>Line size in/out</td> <td>2</td> <td>inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td>40</td> <td>mm</td> </tr> </table>	Design press.	14.1	barG	Design temp.	-10	degC	Line size in/out	2	inch	Line Sch. / Thick	40	mm
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# Specification Sheet

<p>No.: 45 QTY: 1</p> <p>Tag no. 105TV-0606</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 3 inch</p> <p>Rated Cv 115</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS440C</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																			
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# Specification Sheet

<p>No.: 46 QTY: 1</p> <p>Tag no. 105FV-0610</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=6.3 inch</p> <p>Rated Cv 6.3</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 47 QTY: 1</p> <p>Tag no. 105LV-0616</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=6.3 inch</p> <p>Rated Cv 6.3</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 49 QTY: 1</p> <p>Tag no. 105PV-0704B</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 4 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 220</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 50 QTY: 1</p> <p>Tag no. 105FV-0716</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/2 inch</p> <p>Rated Cv 30</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																												
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<p>No.: 51 QTY: 1</p> <p>Tag no. 105FV-0723</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=1.0 inch</p> <p>Rated Cv 1.0</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																												
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Design press.	31	barG																																																											
Design temp.	-10	degC																																																											
Line size in/out	2	inch																																																											
Line Sch. / Thick	40	3.9 mm																																																											

# Specification Sheet

<p>No.: 52 QTY: 1</p> <p>Tag no. 105FV-0801</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HLS</p> <p>Description Small-Port Single Seated Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: center;">BUTANE</th> <th style="text-align: center;">LIQUID</th> <th style="text-align: center;">[</th> <th style="text-align: center;">LIQUID</th> <th style="text-align: center;">]</th> </tr> <tr> <th></th> <th style="text-align: center;">MAX</th> <th style="text-align: center;">NOR</th> <th style="text-align: center;">MIN</th> <th style="text-align: center;">UNIT</th> <th></th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td style="text-align: center;">2867</td> <td style="text-align: center;">2867</td> <td style="text-align: center;">1720</td> <td style="text-align: center;">kg/h</td> <td></td> </tr> <tr> <td>Inlet pressure</td> <td style="text-align: center;">22</td> <td style="text-align: center;">22</td> <td style="text-align: center;">22.3</td> <td style="text-align: center;">barG</td> <td></td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td style="text-align: center;">barG</td> <td></td> </tr> <tr> <td>Diff. pressure</td> <td style="text-align: center;">1.9</td> <td style="text-align: center;">1.9</td> <td style="text-align: center;">2.1</td> <td style="text-align: center;">bar</td> <td></td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td style="text-align: center;">31</td> <td></td> <td style="text-align: center;">bar</td> <td></td> </tr> <tr> <td>Temperature</td> <td style="text-align: center;">81</td> <td style="text-align: center;">81</td> <td style="text-align: center;">81</td> <td style="text-align: center;">degC</td> <td></td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td style="text-align: center;">527</td> <td style="text-align: center;">527</td> <td style="text-align: center;">527</td> <td style="text-align: center;">kg/m3</td> <td></td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td style="text-align: center;">MW</td> <td></td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td style="text-align: center;">cP</td> <td></td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td style="text-align: center;">%</td> <td></td> </tr> <tr> <td>Calculated Cv</td> <td style="text-align: center;">3.312</td> <td style="text-align: center;">3.312</td> <td style="text-align: center;">1.89</td> <td></td> <td></td> </tr> </tbody> </table>	Fluid name	BUTANE	LIQUID	[	LIQUID	]		MAX	NOR	MIN	UNIT		Flow rate	2867	2867	1720	kg/h		Inlet pressure	22	22	22.3	barG		Outlet pressure				barG		Diff. pressure	1.9	1.9	2.1	bar		Shut-off press.		31		bar		Temperature	81	81	81	degC		Sp.Gr. (liq.)	527	527	527	kg/m3		Sp.Gr.(gas,vapor)				MW		Viscosity				cP		Flash				%		Calculated Cv	3.312	3.312	1.89			<p><b>&lt;Seat Leakage&gt;</b></p> <p style="text-align: center;">CLASS VI (SV0201-008)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td style="text-align: center;">31</td> <td style="text-align: right;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: center;">-10</td> <td style="text-align: right;">degC</td> </tr> <tr> <td>Line size in/out</td> <td style="text-align: center;">2</td> <td style="text-align: right;">inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: center;">40 / 3.9</td> <td style="text-align: right;">mm</td> </tr> </table>	Design press.	31	barG	Design temp.	-10	degC	Line size in/out	2	inch	Line Sch. / Thick	40 / 3.9	mm
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# Specification Sheet

<p>No.: 53 QTY: 1</p> <p>Tag no. 105FV-0804</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 56</p> <p>Connection size inch</p> <p>Body rating ANSI600</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																			
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# Specification Sheet

<p>No.: 54 QTY: 1</p> <p>Tag no. 105FV-0805</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HLC</p> <p>Description Small-Port Cage Guide Type Single Seated Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=1.6 inch</p> <p>Rated Cv 1.6</p> <p>Connection size inch</p> <p>Body rating ANSI600</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS304L STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
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# Specification Sheet

<p>No.: 55 QTY: 1</p> <p>Tag no. 105LV-0903</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/4 inch</p> <p>Rated Cv 21</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V7590/V563(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: center;">PROPANE</th> <th style="text-align: center;">LIQUID</th> <th style="text-align: center;">[</th> <th style="text-align: center;">LIQUID</th> <th style="text-align: center;">]</th> </tr> <tr> <th></th> <th style="text-align: center;">MAX</th> <th style="text-align: center;">NOR</th> <th style="text-align: center;">MIN</th> <th style="text-align: center;">UNIT</th> <th></th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td style="text-align: center;">11006</td> <td style="text-align: center;">11006</td> <td style="text-align: center;">1651</td> <td style="text-align: center;">kg/h</td> <td></td> </tr> <tr> <td>Inlet pressure</td> <td style="text-align: center;">2.84</td> <td style="text-align: center;">2.84</td> <td style="text-align: center;">2.84</td> <td style="text-align: center;">barG</td> <td></td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td style="text-align: center;">barG</td> <td></td> </tr> <tr> <td>Diff. pressure</td> <td style="text-align: center;">2.4</td> <td style="text-align: center;">2.4</td> <td style="text-align: center;">2.5</td> <td style="text-align: center;">bar</td> <td></td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td style="text-align: center;">11.4</td> <td></td> <td style="text-align: center;">bar</td> <td></td> </tr> <tr> <td>Temperature</td> <td style="text-align: center;">-8.8</td> <td style="text-align: center;">-8.8</td> <td style="text-align: center;">-8.8</td> <td style="text-align: center;">degC</td> <td></td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td style="text-align: center;">538</td> <td style="text-align: center;">538</td> <td style="text-align: center;">538</td> <td style="text-align: center;">kg/m3</td> <td></td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td style="text-align: center;">MW</td> <td></td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td style="text-align: center;">cP</td> <td></td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td style="text-align: center;">%</td> <td></td> </tr> <tr> <td>Calculated Cv</td> <td style="text-align: center;">11.2</td> <td style="text-align: center;">11.2</td> <td style="text-align: center;">1.646</td> <td></td> <td></td> </tr> </tbody> </table>	Fluid name	PROPANE	LIQUID	[	LIQUID	]		MAX	NOR	MIN	UNIT		Flow rate	11006	11006	1651	kg/h		Inlet pressure	2.84	2.84	2.84	barG		Outlet pressure				barG		Diff. pressure	2.4	2.4	2.5	bar		Shut-off press.		11.4		bar		Temperature	-8.8	-8.8	-8.8	degC		Sp.Gr. (liq.)	538	538	538	kg/m3		Sp.Gr.(gas,vapor)				MW		Viscosity				cP		Flash				%		Calculated Cv	11.2	11.2	1.646			<p><b>&lt;Seat Leakage&gt;</b></p> <p style="text-align: center;">CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td style="text-align: center;">11.4</td> <td style="text-align: right;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: center;">-70</td> <td style="text-align: right;">degC</td> </tr> <tr> <td>Line size in/out</td> <td style="text-align: center;">4</td> <td style="text-align: right;">inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: center;">10S / 3</td> <td style="text-align: right;">mm</td> </tr> </table>	Design press.	11.4	barG	Design temp.	-70	degC	Line size in/out	4	inch	Line Sch. / Thick	10S / 3	mm
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# Specification Sheet

<p>No.: 56 QTY: 1</p> <p>Tag no. 105FV-1006</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 50</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 57 QTY: 1</p> <p>Tag no. 105LV-1010</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HTS</p> <p>Description Top-Guided Single Seated Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/4 inch</p> <p>Rated Cv 17</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS304L</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 58 QTY: 1</p> <p>Tag no. 105FV-0913</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 56</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 60 QTY: 1</p> <p>Tag no. 107FV-0115</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=4.0 inch</p> <p>Rated Cv 4.0</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p style="padding-left: 20px;">Action</p> <p>Solenoid valve</p> <p style="padding-left: 20px;">Action</p> <p style="padding-left: 20px;">Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 61 QTY: 1</p> <p>Tag no. 107HV-0118 (delete)</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model</p> <p>Description</p> <p>Valve size inch</p> <p>Port size inch</p> <p>Rated Cv</p> <p>Connection size inch</p> <p>Body rating</p> <p>End connection</p> <p>Body material</p> <p>Trim material</p> <p>Flow characteristic</p> <p>Bonnet type</p> <p>Actuator</p> <p>Manual operator</p> <p>Valve action</p> <p>Gland packing</p> <p>Gasket</p> <p>Grease</p> <p>Air supply</p> <p>Spring range</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p>    Explosion-proof</p> <p>    Signal</p> <p>Regurator</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>    Action</p> <p>Solenoid valve</p> <p>    Action</p> <p>    Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p><b>&lt;Finish&gt;</b></p> <p>Body:</p> <p>Diaph. Case:</p> <p>Yoke:</p> <p>Paint:</p>																																																																	
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<p>No.: 62 QTY: 1</p> <p>Tag no. 107FV-0119</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=6.3 inch</p> <p>Rated Cv 6.3</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p style="padding-left: 20px;">Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p style="padding-left: 20px;">Action En. : CV Open , De-en.: Close</p> <p style="padding-left: 20px;">Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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Sp.Gr.(gas,vapor)	44.1	44.1	44.1	MW																																																																										
Viscosity				cP																																																																										
Flash				%																																																																										
Calculated Cv	3.842	0.6682	0.2005																																																																											
Design press.	11.4	barG																																																																												
Design temp.	-45	degC																																																																												
Line size in/out	/	2 inch																																																																												
Line Sch. / Thick	40 /	3.9 mm																																																																												

# Specification Sheet

<p>No.: 63 QTY: 1</p> <p>Tag no. 107HV-0220</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCN</p> <p>Description Compressible Fluid Service Low-Noise Cage Type Control Valves</p> <p>Valve size 6 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 120</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic LINEAR</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 64 QTY: 1</p> <p>Tag no. 107HV-0602</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCN</p> <p>Description Compressible Fluid Service Low-Noise Cage Type Control Valves</p> <p>Valve size 4 inch</p> <p>Port size 2-1/2 inch</p> <p>Rated Cv 68</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic LINEAR</p> <p>Bonnet type PLAIN</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 65 QTY: 1</p> <p>Tag no. 107LV-0801</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model VDC</p> <p>Description Cage Type Double Seated Control Valve</p> <p>Valve size 12 inch</p> <p>Port size 12 inch</p> <p>Rated Cv 1440</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator VA5</p> <p>Manual operator ---</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p style="padding-left: 20px;">Action</p> <p>Solenoid valve</p> <p style="padding-left: 20px;">Action</p> <p style="padding-left: 20px;">Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 66 QTY: 1</p> <p>Tag no. 107LV-0803</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model VDC</p> <p>Description Cage Type Double Seated Control Valve</p> <p>Valve size 10 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 640</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator VA5</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYL-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 67 QTY: 1</p> <p>Tag no. 107LV-1104</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 179</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p style="padding-left: 20px;">Action Full Open and Close on</p> <p>Solenoid valve</p> <p style="padding-left: 20px;">Action</p> <p style="padding-left: 20px;">Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 68 QTY: 1</p> <p>Tag no. 107LV-1203</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 179</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p style="padding-left: 20px;">Action Full Open and Close on</p> <p>Solenoid valve</p> <p style="padding-left: 20px;">Action</p> <p style="padding-left: 20px;">Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																												
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# Specification Sheet

<p>No.: 69 QTY: 1</p> <p>Tag no. 107HV-1509</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCN</p> <p>Description Compressible Fluid Service Low-Noise Cage Type Control Valves</p> <p>Valve size 6 inch</p> <p>Port size 5 inch</p> <p>Rated Cv 175</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic LINEAR</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 70 QTY: 1</p> <p>Tag no. 107LV-1603</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=4.0 inch</p> <p>Rated Cv 4.0</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p style="padding-left: 20px;">Action Full Open and Close on</p> <p>Solenoid valve</p> <p style="padding-left: 20px;">Action</p> <p style="padding-left: 20px;">Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
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# Specification Sheet

<p>No.: 71 QTY: 1</p> <p>Tag no. 107FV-1609</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=0.63 inch</p> <p>Rated Cv 0.63</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p style="padding-left: 20px;">Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p style="padding-left: 20px;">Action En. : CV Open , De-en.: Close</p> <p style="padding-left: 20px;">Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																										
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# Specification Sheet

<p>No.: 72 QTY: 1</p> <p>Tag no. 107HV-1612</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 6 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 175</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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<p>No.: 73 QTY: 1</p> <p>Tag no. 107FV-1706A</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p style="padding-left: 20px;">Action</p> <p>Solenoid valve</p> <p style="padding-left: 20px;">Action</p> <p style="padding-left: 20px;">Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																
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<p>No.: 74 QTY: 1</p> <p>Tag no. 107FV-1706B</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 44</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p style="padding-left: 20px;">Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p style="padding-left: 20px;">Action En. : CV Open , De-en.: Close</p> <p style="padding-left: 20px;">Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 75 QTY: 1</p> <p>Tag no. 107PV-1708</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACN</p> <p>Description Low-Noise Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 5 inch</p> <p>Rated Cv 175</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M/SUS316 STELLITE</p> <p>Flow characteristic LINEAR</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal</p> <p style="padding-left: 20px;">Explosion-proof</p> <p style="padding-left: 20px;">Signal On-Off action</p> <p>Regurator KZ03-3B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p style="padding-left: 20px;">Action</p> <p>Solenoid valve</p> <p style="padding-left: 20px;">Action</p> <p style="padding-left: 20px;">Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 77 QTY: 1</p> <p>Tag no. 132LV-0103</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 4 inch</p> <p>Port size 3 inch</p> <p>Rated Cv 115</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS440C</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 81 QTY: 1</p> <p>Tag no. 926PV-0308</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 4 inch</p> <p>Port size 3 inch</p> <p>Rated Cv 115</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th style="text-align: center;">AIR</th> <th colspan="3" style="text-align: center;">[ GAS ]</th> </tr> <tr> <th></th> <th style="text-align: center;">MAX</th> <th style="text-align: center;">NOR</th> <th style="text-align: center;">MIN</th> <th style="text-align: center;">UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td style="text-align: center;">2560</td> <td style="text-align: center;">640</td> <td style="text-align: center;">128</td> <td style="text-align: center;">kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td style="text-align: center;">6.7</td> <td style="text-align: center;">7.5</td> <td style="text-align: center;">8</td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Diff. pressure</td> <td style="text-align: center;">0.1</td> <td style="text-align: center;">0.5</td> <td style="text-align: center;">1.3</td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td style="text-align: center;">10</td> <td></td> <td style="text-align: center;">bar</td> </tr> <tr> <td>Temperature</td> <td style="text-align: center;">38</td> <td style="text-align: center;">38</td> <td style="text-align: center;">38</td> <td style="text-align: center;">degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td></td> <td></td> <td></td> <td style="text-align: center;">kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td style="text-align: center;">29</td> <td style="text-align: center;">29</td> <td style="text-align: center;">29</td> <td style="text-align: center;">MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td style="text-align: center;">cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td style="text-align: center;">%</td> </tr> <tr> <td>Calculated Cv</td> <td style="text-align: center;">101.8</td> <td style="text-align: center;">10.96</td> <td style="text-align: center;">1.351</td> <td></td> </tr> </tbody> </table>	Fluid name	AIR	[ GAS ]				MAX	NOR	MIN	UNIT	Flow rate	2560	640	128	kg/h	Inlet pressure	6.7	7.5	8	barG	Outlet pressure				barG	Diff. pressure	0.1	0.5	1.3	bar	Shut-off press.		10		bar	Temperature	38	38	38	degC	Sp.Gr. (liq.)				kg/m3	Sp.Gr.(gas,vapor)	29	29	29	MW	Viscosity				cP	Flash				%	Calculated Cv	101.8	10.96	1.351		<p><b>&lt;Seat Leakage&gt;</b></p> <p style="text-align: center;">CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td style="text-align: center;">10</td> <td style="text-align: center;">barG</td> </tr> <tr> <td>Design temp.</td> <td style="text-align: center;">80</td> <td style="text-align: center;">degC</td> </tr> <tr> <td>Line size in/out</td> <td style="text-align: center;">4 / 4</td> <td style="text-align: center;">inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td style="text-align: center;">40 / 6</td> <td style="text-align: center;">mm</td> </tr> </table>	Design press.	10	barG	Design temp.	80	degC	Line size in/out	4 / 4	inch	Line Sch. / Thick	40 / 6	mm
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# Specification Sheet

<p>No.: 82 QTY: 1</p> <p>Tag no. 930PV-0101</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 44</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 83 QTY: 1</p> <p>Tag no. 930PV-0202</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/2 inch</p> <p>Rated Cv 30</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 84 QTY: 1</p> <p>Tag no. 930PV-0205A</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 4 inch</p> <p>Port size 3 inch</p> <p>Rated Cv 103</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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<p>No.: 85 QTY: 1</p> <p>Tag no. 930PV-0205B</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 4 inch</p> <p>Port size 3 inch</p> <p>Rated Cv 103</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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<p>No.: 86 QTY: 1</p> <p>Tag no. 930PV-0307</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 1-1/2 inch</p> <p>Rated Cv 24</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V7132Y+SM636</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 87 QTY: 1</p> <p>Tag no. 932TV-1001A</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACN</p> <p>Description Low-Noise Cage Type Control Valves with Piston Ring</p> <p>Valve size 6 inch</p> <p>Port size 5 inch</p> <p>Rated Cv 175</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M/SUS316 STELLITE</p> <p>Flow characteristic LINEAR</p> <p>Bonnet type PLAIN</p> <p>Actuator HA3</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
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# Specification Sheet

<p>No.: 89 QTY: 1</p> <p>Tag no. 932FV-1103</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 50</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

No.: 90 QTY: 1 Tag no. 934PV-0204A Service <b>&lt; Specification &gt;</b> Model AGVM Description Top-Guided Single-Seat Control Valves  Valve size 1 inch Port size Cv=8.0 inch Rated Cv 8.0 Connection size inch Body rating ANSI300 End connection RF Body material A216WCB Trim material SUS316 Flow characteristic EQ% Bonnet type PLAIN Actuator PSA1 Manual operator Valve action REVERSE(Air fail close) Gland packing NP4519 Gasket V543(PTFE) Grease Air supply 2.7bar Spring range 0.8-2.4bar <b>&lt; Accesories &gt;</b> Positioner / Signal AVP300-FSD2D-1CYS-X Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT Signal 4-20 mADC Regurator KZ03-2B-XX Regulator 2 Limit Switch Action Solenoid valve Action Power supply Others		Product no.: <b>&lt;Option&gt;</b> SV0703-102 Indicating unit : "bar"  SV0601-001 Air piping Connection: 1/4 NPT  SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap  SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem  <b>&lt;Finish&gt;</b> Body: M10B5/10 Diaph. Case: M10B5/10 Yoke: M10B5/10 Paint: Standard	
<b>&lt;Operating condition&gt;</b> Fluid name NITROGEN [ GAS ] MAX NOR MIN UNIT Flow rate 400 400 80 kg/h Inlet pressure 5.8 6 6.2 barG Outlet pressure barG Diff. pressure 3.3 3.5 3.7 bar Shut-off press. 11 bar Temperature 28 28 28 degC Sp.Gr. (liq.) kg/m3 Sp.Gr.(gas,vapor) 28 28 28 MW Viscosity cP Flash %  Calculated Cv 3.376 3.247 0.6308		<b>&lt;Seat Leakage&gt;</b> CLASS IV (SV0201-003)  <b>&lt;Note&gt;</b> Tokumi: -  <b>&lt;Line spec&gt;</b> Design press. 11 barG Design temp. 80 degC Line size in/out // 2 inch Line Sch. / Thick 40 // 3.9 mm	

# Specification Sheet

<p>No.: 91 QTY: 1</p> <p>Tag no. 934PV-0204B</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=1.6 inch</p> <p>Rated Cv 1.6</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Fluid name</th> <th colspan="3">NITROGEN</th> <th>[ GAS ]</th> </tr> <tr> <th></th> <th>MAX</th> <th>NOR</th> <th>MIN</th> <th>UNIT</th> </tr> </thead> <tbody> <tr> <td>Flow rate</td> <td>50.75</td> <td>29</td> <td>5.8</td> <td>kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td>3.3</td> <td>3.5</td> <td>3.7</td> <td>barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Diff. pressure</td> <td>2.3</td> <td>2.5</td> <td>2.7</td> <td>bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td>11</td> <td></td> <td>bar</td> </tr> <tr> <td>Temperature</td> <td>40</td> <td>40</td> <td>40</td> <td>degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td></td> <td></td> <td></td> <td>kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td>28</td> <td>28</td> <td>28</td> <td>MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td>cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td>%</td> </tr> </tbody> </table> <p>Calculated Cv 0.6825 0.3727 0.07138</p>	Fluid name	NITROGEN			[ GAS ]		MAX	NOR	MIN	UNIT	Flow rate	50.75	29	5.8	kg/h	Inlet pressure	3.3	3.5	3.7	barG	Outlet pressure				barG	Diff. pressure	2.3	2.5	2.7	bar	Shut-off press.		11		bar	Temperature	40	40	40	degC	Sp.Gr. (liq.)				kg/m3	Sp.Gr.(gas,vapor)	28	28	28	MW	Viscosity				cP	Flash				%	<p><b>&lt;Seat Leakage&gt;</b></p> <p>CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>Design press.</td> <td>11</td> <td>barG</td> </tr> <tr> <td>Design temp.</td> <td>80</td> <td>degC</td> </tr> <tr> <td>Line size in/out</td> <td>1</td> <td>inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td>80 / 4.5</td> <td>mm</td> </tr> </table>	Design press.	11	barG	Design temp.	80	degC	Line size in/out	1	inch	Line Sch. / Thick	80 / 4.5	mm
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# Specification Sheet

<p>No.: 94 QTY: 1</p> <p>Tag no. 950PV-0204</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCN</p> <p>Description Compressible Fluid Service Low-Noise Cage Type Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 1-1/2 inch</p> <p>Rated Cv 24</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SAET</p> <p>Flow characteristic LINEAR</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-002 Oil-free treatment Gr.B (For stainless steel body)</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 95 QTY: 1</p> <p>Tag no. 951HV-0208</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HTS</p> <p>Description Top-Guided Single Seated Control Valves</p> <p>Valve size 6 inch</p> <p>Port size 5 inch</p> <p>Rated Cv 275</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS304L STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator PSA6</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE), V563(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 2.0-3.9bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYL-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 96 QTY: 1</p> <p>Tag no. 951HV-0216</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HTS</p> <p>Description Top-Guided Single Seated Control Valves</p> <p>Valve size 6 inch</p> <p>Port size 5 inch</p> <p>Rated Cv 275</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS304L STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator PSA6</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE), V563(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 2.0-3.9bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYL-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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<p>No.: 97 QTY: 1</p> <p>Tag no. 951FV-0505</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 4 inch</p> <p>Port size 4 inch</p> <p>Rated Cv 158</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA2</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																												
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# Specification Sheet

<p>No.: 98 QTY: 1</p> <p>Tag no. 951HV-0712</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 650</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type DOUBLE (EXT-2)</p> <p>Actuator HA4</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
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<p>No.: 99 QTY: 1</p> <p>Tag no. 951FV0803</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Open</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

<p>No.: 100 QTY: 1</p> <p>Tag no. 951FV0806</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Open</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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# Specification Sheet

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# Specification Sheet

<p>No.: 102 QTY: 1</p> <p>Tag no. 951FV0812</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Open</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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<p>No.: 103 QTY: 1</p> <p>Tag no. 951FV-0903</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Open</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 104 QTY: 1</p> <p>Tag no. 951FV-0906</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Open</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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<p>No.: 105 QTY: 1</p> <p>Tag no. 951FV-0909</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Open</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 106 QTY: 1</p> <p>Tag no. 951FV-0912</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2W</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE),V7590</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Open</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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<p>No.: 107 QTY: 1</p> <p>Tag no. 951FV-0621</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator PSA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V7590/V563(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																														
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# Specification Sheet

<p>No.: 108 QTY: 1</p> <p>Tag no. 951LV-0622</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=8.0 inch</p> <p>Rated Cv 8.0</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V7590/V563(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																														
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# Specification Sheet

<p>No.: 109 QTY: 1</p> <p>Tag no. 951TV-0625</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=4.0 inch</p> <p>Rated Cv 4.0</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V7590/V563(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																														
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# Specification Sheet

<p>No.: 110 QTY: 1</p> <p>Tag no. 954PV-0101A</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HLS</p> <p>Description Small-Port Single Seated Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=6.3 inch</p> <p>Rated Cv 6.3</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS304L STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V7590/V563(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 111 QTY: 1</p> <p>Tag no. 954PV-0101B</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HTS</p> <p>Description Top-Guided Single Seated Control Valves</p> <p>Valve size 1-1/2 inch</p> <p>Port size Cv=6.3 inch</p> <p>Rated Cv 6.3</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF3</p> <p>Trim material SUS316L+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator HA3</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE), V563(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
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# Specification Sheet

<p>No.: 112                      QTY: 1</p> <p>Tag no. 954PV-0201</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator PSA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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<p>No.: 113 QTY: 1</p> <p>Tag no. 954PV-0207</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HCB</p> <p>Description Pressure Balanced Cage Type Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 44</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SCS14A+SOFT SEAT</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA4</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch VCX5001</p> <p>Action Full Open and Close on</p> <p>Solenoid valve EF8320G174-GRC50</p> <p>Action En. : Control , De-en.: CV Close</p> <p>Power supply AC100V 60Hz</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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<p>No.: 115 QTY: 1</p> <p>Tag no. 960FV-0109</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HLC</p> <p>Description Small-Port Cage Guide Type Single Seated Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=1.6 inch</p> <p>Rated Cv 1.6</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXT-1 LOW</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-003 Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Fluid name</td> <td style="width: 15%;">HC LIQUID</td> <td style="width: 15%;">NOR</td> <td style="width: 15%;">MIN</td> <td style="width: 15%;">[ LIQUID ]</td> <td style="width: 15%;">UNIT</td> </tr> <tr> <td></td> <td>MAX</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Flow rate</td> <td>1100</td> <td>1100</td> <td></td> <td></td> <td>kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td>20.4</td> <td>12.5</td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Diff. pressure</td> <td>20</td> <td>12.25</td> <td></td> <td></td> <td>bar</td> </tr> <tr> <td>Shut-off press.</td> <td></td> <td>26</td> <td></td> <td></td> <td>bar</td> </tr> <tr> <td>Temperature</td> <td>-1</td> <td>-1</td> <td></td> <td></td> <td>degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td>611</td> <td>611</td> <td></td> <td></td> <td>kg/m<sup>3</sup></td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td></td> <td>MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td></td> <td>cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td></td> <td>%</td> </tr> </table> <p>Calculated Cv 0.3638 0.4648</p>	Fluid name	HC LIQUID	NOR	MIN	[ LIQUID ]	UNIT		MAX					Flow rate	1100	1100			kg/h	Inlet pressure	20.4	12.5			barG	Outlet pressure					barG	Diff. pressure	20	12.25			bar	Shut-off press.		26			bar	Temperature	-1	-1			degC	Sp.Gr. (liq.)	611	611			kg/m <sup>3</sup>	Sp.Gr.(gas,vapor)					MW	Viscosity					cP	Flash					%	<p><b>&lt;Seat Leakage&gt;</b></p> <p>CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Design press.</td> <td style="width: 30%;">26</td> <td style="width: 30%;">barG</td> </tr> <tr> <td>Design temp.</td> <td>-25</td> <td>degC</td> </tr> <tr> <td>Line size in/out</td> <td>2</td> <td>inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td>40</td> <td>3.9 mm</td> </tr> </table>	Design press.	26	barG	Design temp.	-25	degC	Line size in/out	2	inch	Line Sch. / Thick	40	3.9 mm
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# Specification Sheet

<p>No.: 116 QTY: 1</p> <p>Tag no. 960FV-0216</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVM</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 1 inch</p> <p>Port size Cv=10 inch</p> <p>Rated Cv 10</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material SUS316 STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type EXTENTION-2</p> <p>Actuator PSA1</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing V-PTFE</p> <p>Gasket V7590/V563(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p>SV0018-005 Oil-free Gr.B (For stainless steel body) and Water-free treatment</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																												
<p><b>&lt;Operating condition&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Fluid name</td> <td style="width: 20%;">HC LIQUID</td> <td style="width: 10%;">[</td> <td style="width: 20%;">LIQUID</td> <td style="width: 10%;">]</td> </tr> <tr> <td></td> <td>MAX</td> <td>NOR</td> <td>MIN</td> <td>UNIT</td> </tr> <tr> <td>Flow rate</td> <td>9578</td> <td></td> <td></td> <td>kg/h</td> </tr> <tr> <td>Inlet pressure</td> <td>18.3</td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Outlet pressure</td> <td></td> <td></td> <td></td> <td>barG</td> </tr> <tr> <td>Diff. pressure</td> <td>17.9</td> <td></td> <td></td> <td>bar</td> </tr> <tr> <td>Shut-off press.</td> <td>21.5</td> <td></td> <td></td> <td>bar</td> </tr> <tr> <td>Temperature</td> <td>-57</td> <td></td> <td></td> <td>degC</td> </tr> <tr> <td>Sp.Gr. (liq.)</td> <td>629</td> <td></td> <td></td> <td>kg/m3</td> </tr> <tr> <td>Sp.Gr.(gas,vapor)</td> <td></td> <td></td> <td></td> <td>MW</td> </tr> <tr> <td>Viscosity</td> <td></td> <td></td> <td></td> <td>cP</td> </tr> <tr> <td>Flash</td> <td></td> <td></td> <td></td> <td>%</td> </tr> </table> <p>Calculated Cv 3.3</p>	Fluid name	HC LIQUID	[	LIQUID	]		MAX	NOR	MIN	UNIT	Flow rate	9578			kg/h	Inlet pressure	18.3			barG	Outlet pressure				barG	Diff. pressure	17.9			bar	Shut-off press.	21.5			bar	Temperature	-57			degC	Sp.Gr. (liq.)	629			kg/m3	Sp.Gr.(gas,vapor)				MW	Viscosity				cP	Flash				%	<p><b>&lt;Seat Leakage&gt;</b></p> <p>CLASS IV (SV0201-003)</p> <p><b>&lt;Note&gt;</b> Tokumi: -</p> <p><b>&lt;Line spec&gt;</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Design press.</td> <td style="width: 30%;">30.7</td> <td style="width: 10%;"></td> <td style="width: 10%;">barG</td> </tr> <tr> <td>Design temp.</td> <td>-160</td> <td></td> <td>degC</td> </tr> <tr> <td>Line size in/out</td> <td></td> <td style="text-align: center;">//</td> <td>2 inch</td> </tr> <tr> <td>Line Sch. / Thick</td> <td>40</td> <td style="text-align: center;">//</td> <td>mm</td> </tr> </table>	Design press.	30.7		barG	Design temp.	-160		degC	Line size in/out		//	2 inch	Line Sch. / Thick	40	//	mm
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# Specification Sheet

<p>No.: 117 QTY: 1</p> <p>Tag no. 960PV-0331</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 3 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 59</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material A351CF8M</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA2</p> <p>Manual operator</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYT-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																																				
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# Specification Sheet

<p>No.: 119 QTY: 1</p> <p>Tag no. 962FV-0109</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model HTS</p> <p>Description Top-Guided Single Seated Control Valves</p> <p>Valve size 2 inch</p> <p>Port size 2 inch</p> <p>Rated Cv 50</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material MONEL</p> <p>Trim material MONEL K-500</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA1</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYS-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 120 QTY: 1</p> <p>Tag no. 926PV-0110</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model ACP</p> <p>Description Cage Type Control Valves with Piston Ring</p> <p>Valve size 8 inch</p> <p>Port size 8 inch</p> <p>Rated Cv 610</p> <p>Connection size inch</p> <p>Body rating ANSI300</p> <p>End connection RF</p> <p>Body material A351CF8</p> <p>Trim material A351CF8M STELLITE</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator HA4</p> <p>Manual operator SIDE</p> <p>Valve action REVERSE(Air fail close)</p> <p>Gland packing V-PTFE</p> <p>Gasket V543,V8590</p> <p>Grease</p> <p>Air supply 2.7bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD2D-1CYN-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mADC</p> <p>Regurator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																								
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# Specification Sheet

<p>No.: 121 QTY: 1</p> <p>Tag no. 962LV-0115</p> <p>Service</p> <p><b>&lt; Specification &gt;</b></p> <p>Model AGVB</p> <p>Description Top-Guided Single-Seat Control Valves</p> <p>Valve size 3 inch</p> <p>Port size 2-1/2 inch</p> <p>Rated Cv 85</p> <p>Connection size inch</p> <p>Body rating ANSI150</p> <p>End connection RF</p> <p>Body material A216WCB</p> <p>Trim material SUS316</p> <p>Flow characteristic EQ%</p> <p>Bonnet type PLAIN</p> <p>Actuator PSA3</p> <p>Manual operator</p> <p>Valve action DIRECT(Air fail open)</p> <p>Gland packing NP4519</p> <p>Gasket V543(PTFE)</p> <p>Grease</p> <p>Air supply 4.0bar</p> <p>Spring range 0.8-2.4bar</p> <p><b>&lt; Accesories &gt;</b></p> <p>Positioner / Signal AVP300-FSD3D-1CYQ-X</p> <p>Explosion-proof FM Explosionproof and Flameproof, 1/4 NPT, 1/2 NPT</p> <p>Signal 4-20 mA DC</p> <p>Regulator KZ03-2B-XX</p> <p>Regulator 2</p> <p>Limit Switch</p> <p>Action</p> <p>Solenoid valve</p> <p>Action</p> <p>Power supply</p> <p>Others</p>	<p>Product no.:</p> <p><b>&lt;Option&gt;</b></p> <p>SV0703-102 Indicating unit : "bar"</p> <p>SV0601-001 Air piping Connection: 1/4 NPT</p> <p>SV0602-002 Air piping: Vinyl covered copper tube. Joint:Cr plated with vinyl cap</p> <p>SV0801-E02 Material certificate in english. Scope: valve body, bonnet, plug, seat ring (cage) and stem</p> <p><b>&lt;Finish&gt;</b></p> <p>Body: M10B5/10</p> <p>Diaph. Case: M10B5/10</p> <p>Yoke: M10B5/10</p> <p>Paint: Standard</p>																																																																													
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