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DeZURIK VPB V-PORT BALL VALVES TECHNICAL SPECIFICATIONS



Materials of Construction



Materials of Construction

An Body S2 316 Stainless Steel, ASTM A S1, Orade CR9M An Body S2 215 Stainless Steel, ASTM A 315, Orade CG9M Az Bal S3 317 Stainless Steel, ASTM A 315, Orade CG9M Az Bal S3 317 Stainless Steel, ASTM A 315, Orade CG9M, with Heat Tested Electroless Noted Overlay Ad Retainer S3 317 Stainless Steel, ASTM A 351, Orade CG9M Ad Screw, Retainer S3 317 Stainless Steel, ASTM A 351, Orade CG9M Ad Screw, Retainer AI Hearthing, C, ASTM A 483, Orade CG9M Ad Screw, Retainer AI Hearthing, C, ASTM A 484, Orade CV2M Ad Stainless Steel, ASTM A 315, Orade CG9M Stainless Steel, ASTM A 315, Orade CG9M Ad Stainless Steel, ASTM A 315, Orade CG9M Stainless Steel, ASTM A 315, Orade CG9M Ad Stainless Steel, ASTM A 315, Orade CG9M Stainless Steel, ASTM A 315, Orade CG9M Ad Stainless Steel, ASTM A 315, Orade CG9M Stainless Steel, ASTM A 315, Orade CG9M Ad Stainless Steel, ASTM A 315, Orade CG9M Stainless Steel, ASTM A 315, Orade CG9M Ad Retaind ASTM A 315, Orade CG9M	ltem	Description	Order Code	Material
A1 Body S3 317 Staintes Seel, ASTM A 58, Grade CGBM A2 Bal S5 Carbino Steen, STM A 12, Grade CV20 A2 Bal S5 317 Staintes Seel, ASTM A 32, Grade CV20 A3 Retainer S5 317 Staintes Seel, ASTM A 33, Grade CV20 A4 Bal S5 317 Staintes Seel, ASTM A 33, Grade CGBM A5 Geaker, Fataner A1 18 Staintes Seel, ASTM A 35, Grade CGBM A4 Screw, Retainer A1 18 Staintes Seel, ASTM A 35, Grade CGBM A5 Geaker, Retainer A1 18 Staintes Steel, ASTM A 35, Grade CGBM A6 Shaft, Upper A1 18 Staintes Steel A6 Songe, Retainer A1 18 Staintes Steel A7 Stud, Packing A1 18 Staintes Steel A8 Nut, Packing A1 18 Staintes Steel A9 Gland S2 CS 31 Staintes Steel A11 Thrus Washer S2 CS 31 Staintes Steel A11 Thrus Washer S2 CS 31 Staintes Steel A12 <td></td> <td></td> <td>S2</td> <td>316 Stainless Steel, ASTM A 351, Grade CF8M</td>			S2	316 Stainless Steel, ASTM A 351, Grade CF8M
No. CS Carbon Steel, ASTM 216, Grade W23 HC Hatoliny C, ASTM 216, Grade W23 A2 Boll SSH 317 Sainlass Steel, ASTM 216, Grade W23 A3 Retainer SSH 317 Sainlass Steel, ASTM 216, Grade W23 A3 Retainer SSH 318 Sainlass Steel, ASTM 216, Grade W23 A4 Screw, Retainer S 319 Sainlass Steel, ASTM 216, Grade W23 A5 Gasket, Retainer All Flexible Graphic M434, Grade W23 A5 Gasket, Retainer All Flexible Graphic M434, Grade W23 A5 Saud, Paoking All Flexible Graphic M344, Steel A5 Saud, Paoking All Flexible Graphic M344, Steel A6 Saud, Paoking All Tlexible Graphic M344, Steel A7 Stud, Paoking All Tlexible Graphic M344, Steel A8 Gland S2 S3 Stainless Steel A9 Gland S2 S3 Stainless Steel A11 Three Flexible Graphic S4 A12 Baring,	A1	Body	S3	317 Stainless Steel, ASTM A 351, Grade CG8M
A2 Boll ESHH ASTER ASSECTION Concernment A2 Boll SS 317 Stainless Stored, CMM with Heat Treated Electroless Nickel Overlay A3 Retainer SS 317 Stainless Stored, CMM with Heat Treated Electroless Nickel Overlay A3 Retainer SS 317 Stainless Stored, CMM with Heat Treated Electroless Nickel Overlay A4 Server, Retainer AI T6 Stainless Stored, CMM with Heat Treated Electroless Nickel Overlay A4 Server, Retainer AI T6 Stainless Stored CS A5 Geakut, Retainer AI T6 Stainless Stored CS A6 Shaft, Upper Situ Packing AII T8 Stainless Stored A7 Stud. Packing AII T8 Stainless Stored CS A7 Stud. Packing AII T8 Stainless Stored CS A8 Nut, Packing AII T8 Stainless Stored CS A7 Stud. Packing AII T8 Stainless Stored CS A10 Packing C Trust Masker, ASTM A 28, Grade CPBM A11		,	CS	Carbon Steel, ASTM A 216, Grade WCB
A2 Bull ESS 317 Samilars Steel, ASTM A 281, Grade CPBM, with Turgetee Carbiels Develop (ASTM) with Heat Trade Electrobes Nickel Overlay. A3 Retainer S2 317 Samilars Steel, ASTM A 281, Grade CPBM. A3 Retainer S2 317 Samilars Steel, ASTM A 281, Grade CPBM. A4 Screw, Retainer AII 119 Statilities Steel ASTM A 216, Grade CPBM. A4 Screw, Retainer AII 119 Statilities Steel AstM A 28, Grade CPBM. A5 Statk, Upper AII 119 Statilities Steel AstM. A5 Statk, Packing AII 119 Statilities Steel AstM. A5 Statk, Packing AII 119 Statilities Steel AstM. A6 Shaft, Upper AII 119 Statilities Steel, ASTM A 351, Grade CPBM. A7 Stutk, Packing AII 119 Statilities Steel, ASTM A 351, Grade CPBM. A7 Stutk, Packing AII 118 Statilities Steel, ASTM A 351, Grade CPBM. A8 Gland Statk Statilities Steel, ASTM A 351, Grade CPBM. 311 A11 Thrust Wesher GSC 315 Statilitie				Hastelloy C, ASTNI A 494, Grade CW2NI 217 Staipless Steel ASTM A 351 Grade CE8M with Heat Treated Nickel Overlay
No. Hotelay C, ASTM A494, Grade CW2M with Heat Trasted Electroless Nickel Overlay A3 Retainer S3 37 Stainless Steel, ASTM A 391, Grade CG8M Gaset, Retainer AI 189 Stainless Steel, ASTM A 391, Grade CG8M A6 Gasket, Retainer AI 189 Stainless Steel A6 Gasket, Retainer AI 189 Stainless Steel A6 Straft, Upper S10 1206 Dupler, Stainless Steel A7 Stud, Pacing AI 198 Stainless Steel A8 Gland S3 31 Stainless Steel Stainless Steel A1 Thruk Washer S2, CS 318 Stainless Steel Stainless Steel A1 Thruk Washer S2, CS 318 Stainless Steel Stainless Steel A1 Packing C Hatasluoy, C, ASTM A 498, Grade CW2M A1 Thruk Washer S3 31 Stainless Steel	Δ2	Ball	S3S	317 Stainless Steel, ASTM A 351, Grade CF8M, with Tungsten Carbide Overlay
A3 Retainer S2 318 Stanlines Steel, ASTM A 391, Grade CGM A3 Retainer S3 317 Stainles Steel, ASTM A 316, Grade CGM A4 Screw, Retainer All 189 Stainless Steel ASTM A 216, Grade CGM A5 Gasket, Retainer All 189 Stainless Steel ASTM A 216, Grade CGM A6 Staft, Upper Staft PA 495, Grade Steel ASTM A 216, Grade VCB A7 Stud, Packing All 189 Stainless Steel ASTM A 216, Grade CGM A7 Stud, Packing All 189 Stainless Steel ASTM A 216, Grade CFM A8 Gand S3 317 Stainless Steel ASTM A 251, Grade CFM A9 Gand S2 S3 Stafts Steel ASTM A 216, Grade CFM A9 Gand S2 S3 Stafts Stafts A 340, Staft A 276, Type 316 Staft A 276, Type 316 A11 Thrust Washer S3 317 Stainless Steel A STM A 276, Type 316 Staft A 340, Type 317 A12 Bearing, Uppar FT A17 Stainless Steel A STM A 276, Type 316 Staft A 340, Grade CGM A14		Dan	HCNH	Hastellov C. ASTM A494. Grade CW2M with Heat Treated Electroless Nickel Overlav
As Retainer S3 37 Stainless Steel, ASTM A 233, Grade COGM As Screw, Retainer All 1948 Stainless Steel Associated WGB As Screw, Retainer All 1948 Stainless Steel Associated WGB As Screw, Retainer All 1948 Stainless Steel Associated WGB As Screw, Retainer All 1948 Stainless Steel Associated WGB As Nut, Paching All 1948 Stainless Steel Associated WGB As Nut, Paching All 1948 Stainless Steel, ASTM A 35, Grade CGMM As Nut, Paching All 1948 Stainless Steel, ASTM A 35, Grade CGMM As Nut, Paching TC PTFE Charvon Att Thrust Washer S2, CS 315 Stainless Steel, ASTM A 276, Type 317 Att Heartaley, CASTM A 276, Type 317 Astainles, CASTM A 276, Type 317 Att Startales, Steel, ASTM A 276, Type 317 Astainles, Steel, ASTM A 276, Type 317 Att Startales, Steel, ASTM A 276, Type 317 Astainles, Steel, ASTM A 276, Type 317 Att Startales, Steel, ASTM A 2			S2	316 Stainless Steel, ASTM A 351, Grade CF8M
As Induitient CS Carbon Steel, ASTM A 216, Grade WCB. Ad Screw, Retainer All 198 Starius Steel Asterlioy, CASTM A 294, Grade WCB. Ad Gasker, Retainer All 198 Starius Steel Asterlioy, CASTM A 294, Grade WCB. Ad Sarew, Retainer All 198 Starius Steel Asterlioy, CASTM A 294, Alloy N00622 Caramic Coated Ad Stud, Packing All 198 Starius Steel Asterlioy, CASTM A 294, Alloy N00622 Caramic Coated Ad Stud, Packing All 198 Starius Steel ASTM A 351, Grade CBM Ad Gasker, Starius Steel, ASTM A 351, Grade CBM Asterlioy, CASTM A 394, Grade CM2M Ad Gasker, Starius Steel, ASTM A 351, Grade CBM Asterlioy, CASTM A 351, Grade CBM Ad Gasker, Starius Steel, ASTM A 276, Type 316 Asterlioy, CASTM A 351, Grade CBM Ad Starius Steel, ASTM A 351, Grade CBM Asterlioy, CASTM A 351, Grade CBM Ad Bearing, Upport FT 317 Starines Steel, ASTM A 276, Type 317 Ad Gasker, Seat Starines Steel Astern A 35, Grade CBM, Hanger Arbid Asterlioy, CASTM A 349, Grade CBM, Hanger Arbid Asterlioy, CASTM 434, Grade CBM, Hanger Arbid A	1 42	Potoinar	S3	317 Stainless Steel, ASTM A 351, Grade CG8M
HC Haselboy C, ASTM A 494, Grade CW2M A6 Gasket, Retainer All 1948 Stainless Steal A6 Gasket, Retainer All Packbel Graphite A7 Staft, Upper Sta 17.4 PH Stainless Steal A7 Stud, Packing All 1948 Stainless Steal A7 Stud, Packing All 1948 Stainless Steal A8 Stud, Packing All 1948 Stainless Steal A9 Gland 20.5 20.3 TS Stainless Steal, STM A 251, Grade CP9M A9 Gland TC PTFE Chevron A10 Packing TC PTFE Chevron A11 Thorus Washer Stainless Steal, ASTM A 276, Type 316 A11 Thorus Washer Stainless Steal, ASTM A 276, Type 317 A12 Bearing, Upper FT 317 Stainless Steal A13 Set Scrow Sta, HC Alloy 20 Stainless Steal A14 Gasket, Seat Staf, SSI 317 Stainless Steal A14 Gasket, Seat Staf, SSI 317 Stainless Steal	AS	netainer	CS	Carbon Steel, ASTM A 216, Grade WCB
Add Serew, Retainer All 18-8 Starlines Steel AG Gasker, Retainer All 18-bb Graphte Steel AG Shaft, Upper 50 17-4 PH Stainlose Steel AZ Stud, Packing All 18-8 Starlines Steel AZ Stud, Packing All 18-8 Starlines Steel AA Nut, Packing All 18-8 Starlines Steel AB Nut, Packing All 18-8 Starlines Steel, ASTM A 351, Grade CFBM AB Gland S3 316 Starlines Steel, ASTM A 351, Grade CFBM AD Gland S3 17 Starlines Steel, ASTM A 351, Grade CFBM AD Packing G2 Brainfox Graphite AI1 Thrust Washer S3 317 Stailness Steel, ASTM A 276, Type 317 AI2 Bearing, Upper HC Hastelloy C, ASTM B 74 or B 575 AI3 Set Screw S3, CS 317 Stailness Steel S4 Sc Starless Steel S3, HC Alloy 20 Stailness Steel AI3 Set Screw S3, SSI 317 Stailness Steel, ASTM A 351, Grade COBM, Encetones N			HC	Hastelloy C, ASTM A 494, Grade CW2M
Ab Casaket, Retainer All Practic craphics A6 Shaft, Upper Si0 2226 Euplex Stainless Steel A7 Statut, Pastinico, Casaket Sin Cr-PH Stainless Steel A7 Stud, Pasting All The Statutory, CasTM Stot. Alloy N06022 Ceramic Coated A7 Stud, Pasting All The Statutory, CasTM Stot. Stot. A8 Nut, Packing Si 317 Statutess Steel. ASTM A 351, Grade CFBM A8 Stud, Pasting Si Si Si A10 Packing TC PTFE Cherron A11 Thrust Washer Si Si Si A12 Bearing, Upper FT Si Si Sisteless Streel Si A13 Sat Screw Si Si Sisteless Streel Sisteless Streel Sisteless Streel A13 Gastet, Seat Sist, Sisteless Streel Sisteless Streel Sisteless Streel Sisteless Streel A14 Gastet, Seat Sisteless Streel Sisteless Streel Sisteless Sisteel Sisteeless Streel	A4	Screw, Retainer	All	18-8 Stainless Steel
Adi Shaft, Upper Stud 200 Upper Standings Stell Adi Stud, Packing Nuc Hearnic Coated Ari Stud, Packing Ali 199 Stainlines Stell Adi Nuc Packing Ali 199 Stainlines Stell Adi Nuc Packing Ali 199 Stainlines Stell Adi Stud, Packing Ali 199 Stainlines Stell Adi Gland Stud, Packing Stud, Packing Ali Thrust Washer Stud, Stainlines Stell, ASTM A 431, Grade CW2M Ali Thrust Washer Stainlines Stell, ASTM A 276, Type 316 Ali Thrust Washer Stainlines Stell, ASTM A 276, Type 317 Ali Thrust Washer Stainlines Stell, ASTM A 276, Type 317 Ali FT 317 Stainlines Stell ASTM A931, Grade CM2M Ali Stainlines Stell ASTM A 276, Type 316 Stainlines Ali Stainlines Stell ASTM A 278, Type 317 HC Ali Stainlines Stell ASTM A 278, Type 316 Stainlines Ali Stainlises Stell AST	A5	Gasket, Retainer	All	Flexible Graphite
A6 Shaft, Upper UCC Hantloy C, ASTM B 574, Alloy N06022 Caramic Coated A7 Stud, Packing All 184 Stainless Steel 184 A8 Nut, Packing All 184 Stainless Steel ASTM A 251, Grade CFBM A9 Gland 53.0 317 Stainless Steel, ASTM A 351, Grade CGM A10 Packing IC Heateloy C, ASTM A 494, Grade CW2M A11 Thrust Washer IC Heateloy C, ASTM A 494, Grade CW2M A11 Thrust Washer S2, CS 316 Stainless Steel, ASTM A 276, Type 317 A12 Bearing, Upper IC Heateloy C, ASTM B 57.0 B57.6 A12 Bearing, Upper IC Heateloy C, ASTM B 57.0 B57.6 A13 Set Screw S3, HC FIB Stainless Steel S53.3 A14 Gasket, Seat S3, S31 G17 Stainless Steel, ISTM A S1, Grade CSM, Tungten Carbide Overlay, Heat Treated RT RT Grade Steel, Screw S3, S31 G17 Stainless Steel, ISTM A S1, Grade CSM, Tungten Carbide Overlay, Heat Treated RT Rtiforcoad PTFE, Filled 15% Glass, 5% Molybdarum S55, S31 G1			510	2205 Duplex Stainless Steel
INC Timourn, Caramic Coated A7 Stud, Packing All 184 Sainites Sited A8 Nut, Packing All 184 Sainites Sited A9 Gland S2, CS 319 Suinitess Sited, ASTM A 351, Grade CGM A9 Gland S3 317 Suinitess Sited, ASTM A 351, Grade CWM A10 Packing IC PTFE Chevron G2 Braided Carbon Graphite Station Sited, ASTM A 276, Typa 316 A11 Thrust Washer S2, CS 319 Stainless Sted, ASTM A 276, Typa 317 A12 Bearing, Upper FT 317 Stainless Sted, ASTM A 276, Typa 316 A13 Set Screw S2, CS 319 Stainless Sted State Corbin Mathematics A14 Gasket, Seat S2, S3, HC Heebib Graphite HC A14 Gasket, Seat S2, S3, S381 317 Stainless Sted AST, Sankag, S5, Molybudney, Heat Treated HT Reside Graphite S3 317 Stainless Sted AST, Grade CMA, Tungten Carbide Overlay A15 Gasket, Seat S2, S33 317 Stainless Sted AST, Grade CMA, Tungten Carbide Overla	A6	Shaft, Upper	НСС	Hastellov C. ASTM B 574, Allov N06022 Ceramic Coated
A7 Stud, Packing All 184 Stainless Steel A8 Mut, Packing All 184 Stainless Steel ASTM A 351, Grade CGM A9 Gland S3 317 Stainless Steel, ASTM A 351, Grade CGM A10 Packing TC Herevron A11 Thrust Washer G2 Braided Carbon Graphite A11 Thrust Washer S2, CS 316 Stainless Steel, ASTM A 276, Type 316 A11 Thrust Washer FT 317 Stainless Steel, ASTM A 276, Type 317 A12 Bearing, Upper FT 317 Stainless Steel, ASTM A 276, Type 317 A12 Set Screw S2, CS 316 Stainless Steel ASTM A 276, Type 317 A13 Set Screw S2, CS 316 Stainless Steel S3 A13 Set Screw S2, CS 316 Stainless Steel S3 A14 Gasket, Seat S3, S3 317 Stainless Steel, IASTM A 357, Grade CMAN, Heat Treated A14 Gasket, Saat S3, S3 317 Stainless Steel, IASTM A 351, Grade CGMAN, Heat Treated A15 Seat S3, S3 317 Stainless Steel			TNC	Titanium, Ceramic Coated
AB Nut, Packing SQ. CS 316 Stainless Steel, ASTM A 351, Grade CFBM A9 Gland SQ. CS 316 Stainless Steel, ASTM A 351, Grade CGBM A10 Packing TG Pref Chewron A11 Packing TG Pref Chewron A11 Thrust Washe SQ. CS 316 Stainless Steel, ASTM A 276, Type 317 A11 Thrust Washe SQ. CS 316 Stainless Steel, ASTM A 276, Type 317 A12 Bearing, Upper FT 317 Stainless Steel, ASTM A 276, Type 317 A13 Set Screw SQ. CS 316 Stainless Steel A14 Gasket, Seet SQ. CS 316 Stainless Steel A14 Gasket, Seet SQ.	A7	Stud, Packing	All	18-8 Stainless Steel
A9 Sin Stantanes Steel, ASTM A 351, Grade CBM A10 Packing TC HPR TC PTFE Chevron TS Sintas Steel, ASTM A 326, Grade CGBM A11 Thrus Washer S2 S2 Sintaded Carbon Graphite A11 Thrus Washer S2 S2 Sintaded Carbon Graphite A11 Thrus Washer S2 S2 Sintas Steel, ASTM A 276, Type 310 A12 Bearing, Upper HC Hastelloy C, ASTM B 574 or 8 575 HC A12 Set Screw S2 S3 Sintaless Steel Sintas Steel, ASTM A 276, Type 317 A13 Set Screw S2 S3 Sintaless Steel Sintaless Steel Sintaless Steel A14 Gasket, Seat S2, CS Sintaless Steel Sintaless Ste	A8	Nut, Packing	All	18-8 Stainless Steel
A9 Gland S3 317 Stainless Steel, ASTM A 351, Grade CQBM A10 Packing TC PTFE Chevron A11 Thrust Waher S2, CS 316 Stainless Steel, ASTM A 276, Type 316 A11 Thrust Waher S2, CS 316 Stainless Steel, ASTM A 276, Type 317 A11 Thrust Waher S3 317 Stainless Steel, MA 276, Type 317 A12 Bearing, Upper HC Hastelloy C, ASTM 849, A276, Type 317 A12 Bearing, Upper HC Hastelloy C, ASTM 849, A276, Type 317 A13 Set Screw S2, CS 316 Stainless Steel A14 Gasket, Set S2, CS 316 Stainless Steel A14 Gasket, Set S3, S31 317 Stainless Steel, Flextholes Nickel Overlay, Heat Treated A14 Gasket, Set S3, S331 317 Stainless Steel, ASTM A 350, Grade CG8M, Electroless Nickel Overlay A15 Sast S37 Stainless Steel, ASTM A 350, Grade CG8M, Flextones Nickel Overlay, Heat Treated, Electroless Nickel Overlay A14 Gasket, Set S3 S37 Stainless Steel, Flextble Graphite Filled A17 Gasket, Set S3			S2, CS	316 Stainless Steel, ASTM A 351, Grade CF8M
HCHeatelloy C, SIM A 484, Grade CW/MA10PackingTCPTFE ChervonG2Braided Carbon GraphiteA11Thrust WasherS2, CS316 Stainless Steel, ASTM A 276, Type 316A11Thrust WasherS3317 Stainless Steel, ASTM A 276, Type 317A12Bearing, UpperFT317 Stainless Steel, ASTM A 276, Type 317A13Set ScrewS2, CS316 Stainless SteelA14Gasket, SeatS2, CS316 Stainless SteelA15Set ScrewS2, CS316 Stainless SteelA16Gasket, SeatS2, S3, HCFlexible GraphiteA17Gasket, SeatS3, S3SI317 Stainless SteelA18SeatS3, S3SI317 Stainless Steel, ASTM A 351, Grade CF8M, Turgetn Cathide Overlay, Heat TreatedA17Gasket, SeatS3317 Stainless Steel, ASTM A 351, Grade CF8M, Turgetn Cathide Overlay, Heat TreatedA17Gasket, SeatS3317 Stainless Steel, ASTM A 351, Grade CF8M, Turgetn Cathide Overlay, Heat Treated, S5CA17Hc7HHastelloy C, Ratines Steel, ASTM A 343, Grade CF8M, Turgetn Cathide Overlay, Heat Treated, S5CA18Shaft, LowerS3317 Stainless Steel, ASTM A 351, Grade CF8M, Turgetn Cathide Overlay, Heat Treated, S5CA18Shaft, LowerS517.4 PH Stainless SteelA19Bearing, LowerS517.4 PH Stainless Steel, ASTM A 250, Grade CF8M, Turgetn Cathide Overlay, Heat Treated, FTA19Bearing, LowerS517.4 PH Stainless SteelA20Screw, CoverS1Cobatt Chromit	A9	Gland	S3	317 Stainless Steel, ASTM A 351, Grade CG8M
A10 Packing IC Prife Clawon A11 Thrust Washer S2, CS 316 Stainless Steel, ASTM A 276, Type 316 A11 Thrust Washer S2, CS 316 Stainless Steel, ASTM A 276, Type 317 A12 Bearing, Upper FT 317 Stainless Steel Mice Mesh Reinforced PTFE A13 Set Screw S2, CS 316 Stainless Steel A13 Set Screw S2, CS 317 Stainless Steel A14 Gasket, Seat S2, S3, HC Alloy 20 Stainless Steel A14 Gasket, Seat S2, S3, HC Fixed Graphite Seat S3, HC Alloy 20 Stainless Steel, ASTM A 50, Grade CF8M, Treated A16 Seat S3, S3I 317 Stainless Steel, ASTM A 510, Grade CF8M, Turgetan Carbide Overlay, Heat Treated Saf, S3RI 317 Stainless Steel, ASTM A 430, Grade CG8M, Electroless Nickel Overlay, Heat Treated S36, S38, S38, S37 A16 Saf, S3RI 317 Stainless Steel, ASTM A 430, Grade CG8M, Electroless Nickel Overlay, Heat Treated A17 Gasket, Seat S3 S17 Stainless Steel File Stainless Steel A17 Gasket, Seat S17 Stainless Steel File Stainless Ste		1	HC TO	Hastelloy C, ASTM A 494, Grade CW2M
Size Dialed Construction Statules A11 Thrust Washer Size 316 Statuless Steel, ASTM A 276, Type 316 A12 Bearing, Upper FT 317 Statuless Steel, ASTM A 276, Type 317 A12 Bearing, Upper FT 317 Statuless Steel, ASTM A 276, Type 317 A13 Set Screw Size Cobalt Chromium Alley A14 Gasket, Seat Size, Size Size Steel A13 Set Screw Size, Size Size Statuless Steel A14 Gasket, Seat Size, Size Size Statuless Steel A14 Gasket, Seat Size, Size Size Size Size, Size Size, Size Size Size Size Size, Size Size, Size Size Size Size Size Size Size Size Size Size Size A14 Gasket, Seat Size Size Size Size Size Size A14 Hot Hot Hot Hot Hot Hot	A10	Packing		Price Chevron
A11 Thrust Washer S3 Dimensional Steel, ASTM 6.74 or 276, Type 317 A12 Bearing, Upper HC Hastelloy, C, ASTM 6.74 or 276, Type 317 A12 Bearing, Upper FT 317 Stainless Steel Wirk Mesh Reinforced PTFE A13 Set Screw S2, CS 316 Stainless Steel A13 Set Screw S2, CS 316 Stainless Steel A14 Gasket, Seat S2, S3, HC Alloy 20 Stainless Steel A14 Gasket, Seat S2, S3, HC Alloy 20 Stainless Steel A14 Gasket, Seat S3, S33 317 Stainless Steel, ASTM A 531, Grade CG8M, Electroless Nickel Overlay, Heat Treated Sa S3 S317 Stainless Steel, ASTM A 531, Grade CG8M, Electroless Nickel Overlay, Heat Treated Sa S38, S381 317 Stainless Steel, ASTM A 543, Grade CG8M, Electroless Nickel Overlay, Heat Treated Sa S38, S381 317 Stainless Steel Stainless Steel A17 Gasket, Seat S3 S17, Stainless Steel Stainless Steel A17 Gasket, Seat S1 S17, Stainless Steel Stainless Steel A18 Shaft, Lower			S2 CS	316 Stainless Steel ASTM A 276 Type 316
HC Hastelloy C, ASTM E 574 or B 575 A12 Bearing, Upper FT 317 Stainless Steel Wire Mesh Reinforced PTFE HC Hastelloy C Cobait Chronium Alloy Set Screw 52, CS 316 Stainless Steel A13 Set Screw 52, CS 316 Stainless Steel A14 Gasket, Seat 52, CS 316 Stainless Steel A14 Gasket, Seat 52, S3, HC Flexible Graphite Seat S33, S331 317 Stainless Steel, Steel, Electroless Nickel Overlay, Heat Treated Sist, S38, S381 317 Stainless Steel, ASTM A 733, Grade CG8M, Electroless Nickel Overlay Sist, CS 174 PH Stainless Steel, Flexible Graphite Filed HC Hastelloy C, ASTM A 434, Grade CW2M, Heat Treated, Electroless Nickel Overlay A17 Gasket, Seat S3 317 Stainless Steel, Flexible Graphite Filed A18 Shaft, Lower S5 174 PH Stainless Steel S1 A18 Shaft, Lower FT 317 Stainless Steel S1 A19 Bearing, Thurk FT, HC PTFE Electroless Steel S2 A20 Bearing,	A11	Thrust Washer	S3	317 Stainless Steel, ASTM A 276, Type 317
A12 FT 317 Stainless Steel Wire Mesh Reinforced PTFE HC Hastelloy C Set Screw S2, CS 316 Stainless Steel A13 Set Screw S2, CS 316 Stainless Steel Alloy 20 Stainless Steel A14 Gasket, Seat S2, S3, HC Alloy 20 Stainless Steel Alloy 20 Stainless Steel A14 Gasket, Seat S2, S3, HC Floxible Graphite Floxible Graphite A16 Seat S3 S37 Stainless Steel, ASTM A 351, Grade CFM, Tungsten Carbide Overlay, Heat Treated Sas, S3R1 317 Stainless Steel, ASTM A 351, Grade CFM, Tungsten Carbide Overlay, S3R, S3R1 317 Stainless Steel, ASTM A 743, Grade CW2M, Heat Treated, Electroless Nickel Overlay A17 Gasket, Seat S3 S37 Stainless Steel, Floxible Graphite Filled A17 Gasket, Seat S3 S3 S37 Stainless Steel A18 Shaft, Lower S3 S3 S37 Stainless Steel Stainless Steel A18 Shaft, Lower FT S37 Stainless Steel Stainless Steel A19 Bearing, Lower FT Cobalt Chromium Alloy S9 A20 </td <td></td> <td></td> <td>HC</td> <td>Hastelloy C, ASTM B 574 or B 575</td>			HC	Hastelloy C, ASTM B 574 or B 575
A12 Bearing, Upper HC Hastelloy C A13 Set Screw SI Cobalt Chromium Alloy A14 Gaster, Seat S2, CS 318 Stainless Steel A14 Gaster, Seat S2, S3, HC Alloy 20 Stainless Steel A14 Gaster, Seat S2, S3, HC Flexible Graphite A14 Gaster, Seat S2, S3, HC Flexible Graphite A15 Seat S35, S313 317 Stainless Steel, JEItor J0sk, Gaster, S6M Okydenum A16 Sast, Sast 317 Stainless Steel, JEItor J0sk, Gaster, Seat Nungsten Cable Overlay, Heat Treated Singer, Sast S31 317 Stainless Steel, JEItor J0sk, Gaster, Gaster J0sk, Jaster J1sk, Jaster		1	FT	317 Stainless Steel Wire Mesh Reinforced PTFE
All Solutify. opport St. Cobalt Chromium Alloy 39 440C Stainless Steel 39 440C Stainless Steel A13 Set Screw 52, CS 316 Stainless Steel 313 A14 Gasket, Seat 52, CS 317 Stainless Steel, Electroless Nickel Overlay, Heat Treated A14 Sast 317 Stainless Steel, IEled 15%, Glass, 5% Molybdenum A16 Seat 53, SSI 317 Stainless Steel, ASTM A 351, Grade CRM, Tungsten Carbide Overlay S38, SSR 317 Stainless Steel, ASTM A 430, Grade CW2M, Heat Treated, Electroless Nickel Overlay 33 A17 Gasket, Seat S3 317 Stainless Steel, Flexible Graphite Filled A18 Shaft, Lower S1 2205 Duplex Stainless Steel HCR Hastelloy C, ASTM A 434, Grade CW2M, Heat Treated, Electroless Nickel Overlay A18 Shaft, Lower S5 17.4 PH Stainless Steel HCC Hastelloy C, ASTM B 574, Alloy N06022 Ceramic Coated Thruc The prover Stainless Steel S9 440C Stainless Steel A20 Bearing, Thrust FT PTF Ensite Bonded to 317 SS Bearing, Thru	Δ12	Bearing Upper	HC	Hastelloy C
Ai3 Set Screw S2, CS 316 Stainless Steel A13 Set Screw S2, CS 316 Stainless Steel A14 Gasket, Seat S2, CS Al4 Al40 v2 0 Stainless Steel A14 Gasket, Seat S2, CS Al4 Flexible Graphite A16 Seat S3, S31 S17 Stainless Steel, ASTM A 474, Grade CC8M, Electroless Nickel Overlay, Heat Treated Seat S35, S381 317 Stainless Steel, ASTM A 474, Grade CC8M, Electroless Nickel Overlay A17 Gasket, Seat S3 317 Stainless Steel, ASTM A 474, Grade CC8M, Electroless Nickel Overlay A17 Gasket, Seat S3 317 Stainless Steel, Flexible Graphite Filed A18 Shaft, Lower S10 2205 Duplex Stainless Steel Stainless Steel FI 317 Stainless Steel HC Hastelloy C, Flexible Graphite Filed A19 Bearing, Lower S5 FT 317 Stainless Steel FT S117 Stainless Steel A20 Bearing, Thrust FT FT FIF S117 Stainless Steel FT		bearing, opper	SL	Cobalt Chromium Alloy
A13 Set Screw SJ, IC Allo 20 Stainless Steel A14 Gasket, Seat S2, IC Flexible Graphite A14 Gasket, Seat S2, S3, HC Flexible Graphite A16 Seat S3, S3I 317 Stainless Steel, Electroless Nickel Overlay, Heat Treated A16 Seat S35, S3I 317 Stainless Steel, ASTM A 743, Grade CG8M, Electroless Nickel Overlay A17 Gasket, Seat S3 317 Stainless Steel, Hottoless Mickel Overlay, Heat Treated A17 Gasket, Seat S3 317 Stainless Steel, Flexible Graphite Filled A18 Shaft, Lower S3 S5 17.4 PH Stainless Steel Allor No6022 Ceramic Coated A18 Shaft, Lower S10 2205 Duplex Stainless Steel Stainless Steel Heatelloy C, ASTM 8 574, Alloy No6022 Ceramic Coated A18 Shaft, Lower FT S17 Stainless Steel Vire Mesh Reinforced PTFE Heatelloy C, ASTM 8 574, Alloy No6022 Ceramic Coated A19 Bearing, Lower FT TTE Stainless Steel Vire Mesh Reinforced PTFE A20 Bearing, Thrust FT PTFE Fabric Bonded to 317 SS FT			S9	440C Stainless Steel
Alia Gasket, Seat S3, PC Alia y 20 staintiess Steel A14 Gasket, Seat S3 317 Stainless Steel, Electroless Nickel Overlay, Heat Treated A16 Seat S3 317 Stainless Steel, ASTM A 351, Grade CF8M, Tungsten Carbide Overlay, Heat Treated, S5C Sar, S3RI 317 Stainless Steel, ASTM A 743, Grade CG8M, Electroless Nickel Overlay, Heat Treated, Electroless Nickel Overlay,	A13	Set Screw	S2, CS	316 Stainless Steel
And Dasket, Osa Dz. op. Tic Textual Graphite A16 Seat S3 317 Stainless Steel, ASTM A 351, Grade CF8M, Nungsten Carbide Overlay, S3R, S3Ri 317 Stainless Steel, ASTM A 743, Grade CG8M, Electroless Nickel Overlay, S3R, S3Ri A17 Gasket, Seat S3 S3 S3 S3 A17 Gasket, Seat S3 S3 S3 S3 A17 Gasket, Seat S3 S17 Stainless Steel, ASTM A 743, Grade CW2M, Heat Treated, Electroless Nickel Overlay A18 Shaft, Lower S3 S17 Stainless Steel, Flexible Graphite Filled A18 Shaft, Lower S10 2205 Duplex Stainless Steel HCC Hastelloy C, ASTM 8 534, Aloy N06022 Ceramic Coated TNC Titanium, Ceramic Coated TNC Titaniless Steel M18 Bearing, Lower FT 917 Stainless Steel Vire Mesh Reinforced PTFE HC Hastelloy C, ASTM 8 534, Aloy N06022 Ceramic Coated TNC Titanium, Ceramic Coated TNC Titanium, Ceramic Coated A19 Bearing, Thorst FT PTFE Fabric Bonded to 317 SS Scate, Cover	A14	Gaskot Soat	53, TC	Alloy 20 Stalliess Steel
A16 Seat RT Reinforced PTFE, Filled 15% Glass, 5% Molybdenum A16 Sas, S3SI 317 Stainless Steel, ASTM A 351, Grade CF3M, Tungsten Carbide Overlay S37, S3RI 317 Stainless Steel, ASTM A 350, Grade CF3M, Fungsten Carbide Overlay Sas, S3RI 317 Stainless Steel, ASTM A 436, Grade CF3M, Electroless Nickel Overlay A17 Gasket, Seat S3 317 Stainless Steel, Flexible Graphite Filled A18 Shaft, Lower S10 2205 Duplex Stainless Steel A18 Shaft, Lower S5 17-4 PH Stainless Steel A18 Shaft, Lower S5 17-4 PH Stainless Steel A18 Shaft, Lower S5 17-4 PH Stainless Steel A19 Bearing, Lower FT 317 Stainless Steel HC Hastelloy C, ASTM B 534, Alloy N06022 Ceramic Coated TNC Titanium, Ceramic Coated FT 317 Stainless Steel A19 Bearing, Thrust FT FT 917 PTFE Fabric Bonded to 317 SS Sta Cobalt Chromium Alloy Sta Stainless Steel, ASTM A 351, Grade CF8M A20		Gasket, Seat	S3	317 Stainless Steel, Electroless Nickel Overlay, Heat Treated
A16 Seat SS, SSI 317 Stainless Steel, ASTM A 351, Grade CF8M, Tungsten Carbide Overlay. A16 SSR, SSRI 317 Stainless Steel, ASTM A 743, Grade CG8M, Electroless Nickel Overlay. A17 Gasket, Seat SS 317 Stainless Steel, I+1150 HCRI Hastelloy C, ASTM A 494, Grade CWM, Heat Treated, Electroless Nickel Overlay. A17 Gasket, Seat SI0 2205 Duplex Stainless Steel A18 Shaft, Lower SI0 2205 Duplex Stainless Steel A18 Shaft, Lower SI0 2205 Duplex Stainless Steel A19 Bearing, Lower FT 317 Stainless Steel FT 317 Stainless Steel Nice Mesh Reinforced PTFE HC Hastelloy C, ASTM B 574, Alloy N06022 Ceramic Coated A20 Bearing, Lower FT 917 Stainless Steel FT 917 Stainless Steel Stainless A20 Bearing, Thrust FT PTFE Fabric Bonded to 317 SS FL Cobart Chromium Alloy Stainless Steel, ASTM A 351, Grade CF8M A21 Gasket, Cover FI, HC PTFE Fabric Bonded to 317 SS SCover </td <td></td> <td></td> <td>RT</td> <td>Reinforced PTFE, Filled 15% Glass, 5% Molybdenum</td>			RT	Reinforced PTFE, Filled 15% Glass, 5% Molybdenum
A10SeatSign 337317 Stainless Steel, ASTM A 743, Grade CG8M, Electroless Nickel Overlay, Heat Treated S5CA17Gasket, SeatS3317L Stainless Steel, H1150 HCRIA18Gasket, SeatS3317L Stainless Steel, Flexible Graphite FilledA18Shaft, LowerS517.4 PH Stainless SteelA18Shaft, LowerS517.4 PH Stainless SteelA19Bearing, LowerFT317 Stainless SteelA19Bearing, LowerFT317 Stainless SteelA11Gasket, CoverFT317 Stainless SteelA20Bearing, ThrustFT317 Stainless SteelA21Gasket, CoverFT717 Stainless SteelA22CoverFT917 Stainless SteelA22Gasket, CoverFT717 Stainless SteelA23Screw, CoverAllGraphiteA24AdaptorAllGraphiteA25Seal, AdaptorAllGraphiteA24AdaptorAllGraphiteA25Screw, CoverAllGraphiteA26Sereing, AdaptorAllDuctile IronA27Screw, AdaptorAll18-8 Stainless SteelA28Lockwasher, AdaptorAll18-8 Stainless SteelA24AdaptorAll18-8 Stainless SteelA25Seal, AdaptorAll18-8 Stainless SteelA26Serew, CoverAll18-8 Stainless SteelA27Screw, CoverAll18-8 Stainless Steel <t< td=""><td>A 16</td><td></td><td>S3S, S3SI</td><td>317 Stainless Steel, ASTM A 351, Grade CF8M, Tungsten Carbide Overlay</td></t<>	A 16		S3S, S3SI	317 Stainless Steel, ASTM A 351, Grade CF8M, Tungsten Carbide Overlay
SSC 17-4 PH Stainless Steel, H1150 HCRI Hastelloy C, ASTM A 94, Grade CW2M, Heat Treated, Electroless Nickel Overlay A17 Gasket, Seat S3 317L Stainless Steel, Flexible Graphite Filled A18 Shaft, Lower S5 17-4 PH Stainless Steel A18 Shaft, Lower S5 17-4 PH Stainless Steel A18 Shaft, Lower S5 17-4 PH Stainless Steel A19 Bearing, Lower FT 317 Stainless Steel Wire Mesh Reinforced PTFE A19 Bearing, Lower FT 317 Stainless Steel Wire Mesh Reinforced PTFE A20 Bearing, Thrust FT PTFE Fabric Bonded to 317 SS A21 Gasket, Cover AII Graphite A22 Cover S1 Graphite A23 Screw, Cover AII Graphite A24 Adaptor All Stainless Steel A23 Screw, Cover AII Stainless Steel A24 Gasket, Cover AII Graphite A25 Seal, Adaptor AII Stainless Steel <	AIO	Seat	S3R, S3RI	317 Stainless Steel, ASTM A 743, Grade CG8M, Electroless Nickel Overlay, Heat Treated
A17 Gasket, Seat S3 317L Stainless Steel, Flexible Graphite Filled A18 Shaft, Lower S10 2205 Duplex Stainless Steel A18 Shaft, Lower S5 17.4 PH Stainless Steel A19 Bearing, Lower S5 17.4 PH Stainless Steel A19 Bearing, Lower FT 317 Stainless Steel Wire Mesh Reinforced PTFE A19 Bearing, Lower FT 317 Stainless Steel Wire Mesh Reinforced PTFE A20 Bearing, Thrust FT PTFE Fabric Bonded to 317 SS FT, HC PTFE Fabric Bonded to 317 SS FT A20 Bearing, Thrust FT PTFE Fabric Bonded to 317 SS FT, HC PTFE Fabric Bonded to 317 SS SC S10 Stainless Steel SS A21 Gasket, Cover All Graphite GS Cover S2 316 Stainless Steel A22 Cover S2 316 Stainless Steel A23 Screw, Cover All Graphite A24 Adaptor All Ductile Iron			S5C	17-4 PH Stainless Steel , H1150
A17 Gasket, Seat S3 317L Statiliess Steel, Flexible Graphite Filled A18 Shaft, Lower HC Hastelloy C, Flexible Graphite Filled A18 Shaft, Lower S5 17-4 PH Stainless Steel A19 Bearing, Lower FT 317 Stainless Steel A19 Bearing, Lower FT 317 Stainless Steel HC Heldoy C, ASTM B 574, Alloy N06022 Ceramic Coated TNC Titanium, Ceramic Coated HC Heldoy C, ASTM B 574, Alloy N06022 Ceramic Coated TNC Titanium, Ceramic Coated HC Heldoy C, ASTM B 574, Alloy N06022 Ceramic Coated A19 Bearing, Lower FT HC Heldoy C, ASTM B 574, Alloy N06022 Ceramic Coated HC Heldoy C, ASTM B 574, Alloy N06022 Ceramic Coated A20 Bearing, Thrust FT FT PTFE Fabric Bonded to 317 SS Stall Cobalt Chromium Alloy S2 Stainless Steel A21 Gasket, Cover A11 Graphite S2 Stainless Steel, ASTM A 351, Grade CR8M A22 Cover S3 S3 317 Stainless Steel, ASTM A 351, Grade CG8M A23 Screw, Cover All S14 Stainless Steel			HCRI	Hastelloy C, ASTM A 494, Grade CW2M, Heat Treated, Electroless Nickel Overlay
A18Shaft, LowerS10Cuber Stainless SteelA19Saft, LowerS517-4 PH Stainless SteelA19Bearing, LowerFT317 Stainless Steel Wire Mesh Reinforced PTFEHCHastelloy C, ASTM B 574, Alloy N06022 Ceramic CoatedFT317 Stainless Steel Wire Mesh Reinforced PTFEHCHastelloy CS9440C Stainless SteelA20Bearing, ThrustFTFTPTFE Fabric Bonded to 317 SSFTPTFE Fabric Bonded to 317 SSA21Gasket, CoverAllGasket, CoverAllA11GraphiteCoverS2S3317 Stainless Steel, ASTM A 351, Grade CF8MA22CoverS1Carbon Steel, ASTM A 216, Grade WC8HCHaubergor, Carbon Steel, ASTM A 494, Grade CW28A23Screw, CoverAllA14Ductile IronA25Seal, AdaptorA26Bearing, AdaptorA27Screw, AdaptorA28Lockwasher, AdaptorA29Cockwasher, AdaptorA21Stainless SteelA22String, AdaptorA33O-ringA34O-ringA34O-ringA34O-ringS15SLVS, HCVSS104FKM Perfluoroelastomer SealA34O-ringS17SurgersA34O-ringA34O-ringA34O-ringA34O-ringA34O-ringA	A17	Gasket, Seat	HC	Hastellov C Elevible Graphite Filled
A18 Shaft, Lower S5 17-4 PH Stainless Steel HCC Hastelloy C, ASTM B 574, Alloy N06022 Ceramic Coated TNC Titanium, Ceramic Coated FT 317 Stainless Steel Wire Mesh Reinforced PTFE HC Hastelloy C, Stifuless Steel HC Hastelloy C SL Cobalt Chromium Alloy S9 440C Stainless Steel FT PTFE Fabric Bonded to 317 SS FT, HC PTFE Fabric Bonded to 14stelloy C SL Graphite A20 Bearing, Thrust FT, HC PTFE Fabric Bonded to 317 SS SL Graphite A21 Gasket, Cover A11 Graphite A22 Cover S2 316 Stainless Steel, ASTM A 351, Grade CF8M Cover S3 A23 Screw, Cover HC Hastelloy C, ASTM A 494, Grade CW2M A24 Adaptor A25 Seal, Adaptor A26 Bearing, Adaptor A27 Screw, Adaptor A18 Stainless Steel A27 Screw, Adaptor			S10	2205 Duplex Stainless Steel
A18 Shaft, Lower HCC Hastelloy C, ASTM B 574, Alloy N06022 Ceramic Coated A19 TNC Titanium, Ceramic Coated A19 Bearing, Lower FT 317 Stainless Steel Wire Mesh Reinforced PTFE A20 Bearing, Lower HC Hastelloy C S9 440C Stainless Steel FT PTFE Fabric Bonded to 317 SS A20 Bearing, Thrust FT, HC PTFE Fabric Bonded to 137 SS A21 Gasket, Cover All Graphite A22 Cover S2 316 Stainless Steel, ASTM A 351, Grade CF8M S3 317 Stainless Steel, ASTM A 351, Grade CG8M S3 A22 Cover S2 316 Stainless Steel, ASTM A 351, Grade CG8M A23 Screw, Cover All J15 Stainless Steel, ASTM A 494, Grade CW2M A24 Adaptor All Ductile Iron A25 Screw, Adaptor DR, PR Nitrile Rubber, Carbon Steel, Case A26 Bearing, Adaptor DR, PR Nitrile Rubber, Carbon Steel, Case A26 Bearing, Adaptor All 18-8 Stainless Steel A27 Screw, Adaptor All			S5	17-4 PH Stainless Steel
Image: marked base in the image in the im	A18	Snaπ, Lower	HCC	Hastelloy C, ASTM B 574, Alloy N06022 Ceramic Coated
A19Bearing, LowerFT317 Stainless Steel Wire Mesh Reinforced PTFEHCHastelloy CSLCobalt Chromium AlloyS9440C Stainless SteelA20Bearing, ThrustFTPTFE Fabric Bonded to 317 SSFT, HCPTFE Fabric Bonded to Hastelloy CSLGraphiteA21Gasket, CoverAllGraphiteA22CoverS2316 Stainless Steel, ASTM A 351, Grade CF8MS3317 Stainless Steel, ASTM A 351, Grade CC8MCSCarbon Steel, ASTM A 216, Grade WCBHCHastelloy C, ASTM A 244, Grade CW2MA23Screw, CoverAllA14Ductile IronA25Seal, AdaptorDR, PRA26Bearing, AdaptorDR, PRA27Screw, AdaptorAllA28Lockwasher, AdaptorAllA31Seal, O-RingAllA33O-ringS9VS, SLVS, HCVSA34O-ringS9VS, SLVS, HCVSA34O-ringSUS, SLVS, HCVSA34O-ringSLKS, HCKSA34O-ringSLKS, HCKS </td <td></td> <td></td> <td>TNC</td> <td>Titanium, Ceramic Coated</td>			TNC	Titanium, Ceramic Coated
A19Bearing, LowerHCHastelloy CS9440C Stainless SteelA20Bearing, ThrustFTPTFE Fabric Bonded to 317 SSA21Gasket, CoverFT, HCPTFE Fabric Bonded to Hastelloy CA21Gasket, CoverAllGraphiteA22CoverS2316 Stainless Steel, ASTM A 351, Grade CF8MA22CoverS3317 Stainless Steel, ASTM A 351, Grade CG8MA23Screw, CoverAll316 Stainless Steel, ASTM A 351, Grade CG8MA24AdaptorAll316 Stainless SteelA25Seal, AdaptorDR, PRNitrile Ruber, Carbon Steel CaseA26Bearing, AdaptorDR, PRNitrile Ruber, Carbon Steel CaseA27Screw, AdaptorAll18-8 Stainless SteelA28Lockwasher, AdaptorAll18-8 Stainless SteelA31Seal, O-RingAllFluoro Ruber, Encapsulated in PFAA33O-ringS9VS, SLVS, HCVSFluoropolymer SealA34O-ringS9VS, SLVS, HCVSFluoropolymer SealA34O-ringSLKS, HCKSFFKM Perfluoroelastomer Seal			FT	317 Stainless Steel Wire Mesh Reinforced PTFE
SLCoolar Chromium AlloyS9440C Stainless SteelA20Bearing, ThrustFTPTFE Fabric Bonded to 317 SSA21Gasket, CoverAllGraphiteA22CoverS2316 Stainless Steel, ASTM A 351, Grade CF8MA22CoverS2316 Stainless Steel, ASTM A 351, Grade CG8MA23Screw, CoverAllGraphiteA24AdaptorAll316 Stainless SteelA25Seal, AdaptorAll316 Stainless SteelA26Bearing, AdaptorDR, PRNitrile Rubber, Carbon Steel CaseA26Bearing, AdaptorDR, PRNitrile Rubber, Carbon Steel CaseA27Screw, AdaptorAll18-8 Stainless SteelA28Lockwasher, AdaptorAll18-8 Stainless SteelA31Seal, O-RingAllFluoro Rubber, Encapsulated in PFAA33O-ringSyVS, SLVS, HCVSFluoropolymer SealA34O-ringSyVS, SLVS, HCVSFluoropolymer SealA34O-ringSyVS, SLVS, HCVSFluoropolymer SealSLKS, HCKSFFKM Perfluoroelastomer Seal	A19	Bearing, Lower	HC	Hastelloy C
A20Bearing, ThrustFTPTFE Fabric Bonded to 317 SSA21Gasket, CoverAllGraphiteA22CoverS2316 Stainless Steel, ASTM A 351, Grade CF8MA22CoverS2316 Stainless Steel, ASTM A 351, Grade CG8MA22CoverS3Carbon Steel, ASTM A 216, Grade WCBA23Screw, CoverAll316 Stainless SteelA24AdaptorAllDuctile IronA25Seal, AdaptorDR, PRNitrile Rubber, Carbon Steel CaseA26Bearing, AdaptorDR, SSOil-Impregnated BronzeA27Screw, AdaptorAll18-8 Stainless SteelA28Lockwasher, AdaptorAll18-8 Stainless SteelA31Seal, O-RingAll18-8 Stainless SteelA33O-ringSVS, SLVS, HCVSFluoropolymer SealA34O-ringS9VS, SLVS, HCVSFluoropolymer SealA34O-ringS9VS, SLVS, HCVSFluoropolymer SealSLKS, HCKSFFKM Perfluoroelastomer Seal			SL	Lobalt Chromium Alloy
A20Bearing, ThrustFT, HCPTEF Fabric Bonded to Hastelloy CA21Gasket, CoverAllGraphiteA22GoverS2316 Stainless Steel, ASTM A 351, Grade CF8MA22CoverS3317 Stainless Steel, ASTM A 351, Grade CG8MA23Screw, CoverAll316 Stainless Steel, ASTM A 494, Grade WCBA24AdaptorAll316 Stainless SteelA25Seal, AdaptorAllDuctile IronA26Bearing, AdaptorDR, PRNitrile Rubber, Carbon Steel CaseA27Screw, AdaptorAll18-8 Stainless SteelA28Lockwasher, AdaptorAll18-8 Stainless SteelA29SeringAll18-8 Stainless SteelA21Seal, O-RingAllFluoro Rubber, Encapsulated in PFAA32SpringAllFluoro Rubber, Encapsulated in PFAA33O-ringSuVS, SLVS, HCVSFluoropolymer SealA34O-ringSuVS, SLVS, HCVSFluoropolymer SealSLKS, HCKSFFKM Perfluoroelastomer Seal			FT	PTEF Fabric Bonded to 317 SS
SLGraphiteA21Gasket, CoverAllGraphiteA22CoverS2316 Stainless Steel, ASTM A 351, Grade CF8MA22CoverS3317 Stainless Steel, ASTM A 351, Grade CG8MA23CoverAllCSCarbon Steel, ASTM A 494, Grade WCBA24AdaptorAll316 Stainless SteelA25Seal, AdaptorAllDuctile IronA25Seal, AdaptorDR, PRNitrile Rubber, Carbon Steel CaseA26Bearing, AdaptorDR55, 85Oil-Impregnated BronzeA27Screw, AdaptorAll18-8 Stainless SteelA28Lockwasher, AdaptorAll18-8 Stainless SteelA31Seal, O-RingAllFluoro Rubber, Encapsulated in PFAA32SpringAllFluoro Rubber, Encapsulated in PFAA33O-ringSVS, SLVS, HCVSFluoropolymer SealA34O-ringSyS, SLVS, HCVSFluoropolymer SealA34O-ringSUS, SLVS, HCVSFluoropolymer SealSLKS, HCKSFFKM Perfluoroelastomer Seal	A20	Bearing, Thrust	FT, HC	PTFE Fabric Bonded to Hastelloy C
A21Gasket, CoverAllGraphiteA22CoverS2316 Stainless Steel, ASTM A 351, Grade CF8MA24CoverS3317 Stainless Steel, ASTM A 351, Grade CG8MA25CoverGSCarbon Steel, ASTM A 216, Grade WCBA24AdaptorAll316 Stainless SteelA25Seal, AdaptorDR, PRNitrile Rubber, Carbon Steel CaseA26Bearing, AdaptorDR, PRNitrile Rubber, Carbon Steel CaseA27Screw, AdaptorAll18-8 Stainless SteelA28Lockwasher, AdaptorAll18-8 Stainless SteelA31Seal, O-RingAllFluoro Rubber, Encapsulated in PFAA32SpringAllFluoro Rubber, Encapsulated in PFAA33O-ringSVS, SLVS, HCVSFluoropolymer SealA34O-ringSVS, SLVS, HCVSFluoropolymer SealSUSS, HCKSFFKM Perfluoroelastomer SealSLKS, HCKSSUSS, SLVS, HCKSFILOROPOLYmer SealSUSS, SLVS, HCKSFILOROPOLYmer SealSUSS, SLVS, HCKSFILOROPOLYm		3,	SL	Graphite
A22S2316 Stainless Steel, ASTM A 351, Grade CF8MA23CoverS3317 Stainless Steel, ASTM A 351, Grade CG8MA24AdaptorAll316 Stainless Steel, ASTM A 216, Grade WCBA25Seal, AdaptorAll316 Stainless SteelA26Bearing, AdaptorDR, PRNitrile Rubber, Carbon Steel CaseA27Screw, AdaptorAll18-8 Stainless SteelA28Lockwasher, AdaptorAll18-8 Stainless SteelA29Seal, O-RingAll18-8 Stainless SteelA31Seal, O-RingAllFluoro Rubber, Encapsulated in PFAA32O-ringSVS, SLVS, HCVSFluoropolymer SealA34O-ringSVS, SLVS, HCVSFluoropolymer SealA34O-ringSVS, SLVS, HCVSFluoropolymer SealSLKS, HCKSFFKM Perfluoroelastomer Seal	A21	Gasket, Cover	All	Graphite
A22 Cover S3 317 Stainless Steel, ASTM A 351, Grade CG8M CS Carbon Steel, ASTM A 216, Grade WCB HC Hastelloy C, ASTM A 494, Grade CW2M A23 Screw, Cover All 316 Stainless Steel A24 Adaptor All Ductile Iron A25 Seal, Adaptor DR, PR Nitrile Rubber, Carbon Steel Case A26 Bearing, Adaptor DR55, 85 Oil-Impregnated Bronze A27 Screw, Adaptor All 18-8 Stainless Steel A28 Lockwasher, Adaptor All 18-8 Stainless Steel A31 Seal, O-Ring All Fluoro Rubber, Encapsulated in PFA A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring SUS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SUS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal SLKS, HCKS			S2	316 Stainless Steel, ASTM A 351, Grade CF8M
CS Carbon Steel, ASTM A 216, Grade WCB HC Hastelloy C, ASTM A 294, Grade WCB A23 Screw, Cover All A24 Adaptor All A25 Seal, Adaptor DR, PR A26 Bearing, Adaptor DR55, 85 A27 Screw, Adaptor All A28 Carkwasher, Adaptor All A28 Lockwasher, Adaptor All A31 Seal, O-Ring All A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring SUVS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SUVS, SLVS, HCVS Surger Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal	A22	Cover	S3	317 Stainless Steel, ASTM A 351, Grade CG8M
A23 Screw, Cover All 316 Stainleys, Still A 434, Grade CW2M A24 Adaptor All 316 Stainless Steel A25 Seal, Adaptor DR, PR Nitrile Rubber, Carbon Steel Case A26 Bearing, Adaptor DR55, 85 Oil-Impregnated Bronze A27 Screw, Adaptor All 18-8 Stainless Steel A28 Lockwasher, Adaptor All 18-8 Stainless Steel A31 Seal, O-Ring All Fluoro Rubber, Encapsulated in PFA A32 Spring All Fluoropolymer Seal A33 O-ring SUS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SuVS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal SLKS, HCKS				Larbon Steel, ASTM A 216, Grade WCB
A24 Adaptor All Ductile Iron A25 Seal, Adaptor DR, PR Nitrile Rubber, Carbon Steel Case A26 Bearing, Adaptor DR55, 85 Oil-Impregnated Bronze A27 Screw, Adaptor All 18-8 Stainless Steel A28 Lockwasher, Adaptor All 18-8 Stainless Steel A31 Seal, O-Ring All Fluoro Rubber, Encapsulated in PFA A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring SUS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SuS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SuS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal SLKS, HCKS	Δ23	Screw Cover		316 Staipless Steel
A25 Seal, Adaptor DR, PR Nitrile Rubber, Carbon Steel Case A26 Bearing, Adaptor DR55, 85 Oil-Impregnated Bronze A27 Screw, Adaptor All 18-8 Stainless Steel A28 Lockwasher, Adaptor All 18-8 Stainless Steel A31 Seal, O-Ring All Fluoro Rubber, Encapsulated in PFA A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring SUS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SuVS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SuVS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal SLKS, HCKS	A24	Adaptor	All	Ductile Iron
A26 Bearing, Adaptor DR55, 85 Oil-Impregnated Bronze A27 Screw, Adaptor All 18-8 Stainless Steel A28 Lockwasher, Adaptor All 18-8 Stainless Steel A31 Seal, O-Ring All Fluoro Rubber, Encapsulated in PFA A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring SUSS, SLVS, HCVS Fluoropolymer Seal A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SUSS, SLVS, HCVS Fluoropolymer Seal	A25	Seal, Adaptor	DR, PR	Nitrile Rubber, Carbon Steel Case
A27 Screw, Adaptor All 18-8 Stainless Steel A28 Lockwasher, Adaptor All 18-8 Stainless Steel A31 Seal, O-Ring All 18-8 Stainless Steel A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring SyS, SLVS, HCVS Fluoropolymer Seal A34 O-ring SyS, SLVS, HCVS Fluoropolymer Seal	A26	Bearing, Adaptor	DR55, 85	Oil-Impregnated Bronze
A28 Lockwasher, Adaptor All 18-8 Stainless Steel A31 Seal, O-Ring All Fluoro Rubber, Encapsulated in PFA A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal	A27	Screw, Adaptor	All	18-8 Stainless Steel
Adaptor Adaptor Name Procession A31 Seal, O-Ring All Fluoro Rubber, Encapsulated in PFA A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal	A28	Lockwasher,	All	18-8 Stainless Steel
Asia Sear, Orning All Pluoro Rubber, Encapsulated in PFA A32 Spring All Fluoro Rubber, Encapsulated in PFA A33 O-ring S9VS, SLVS, HCVS Fluoro Rubber, Encapsulated in PFA A33 O-ring S9VS, SLVS, HCVS Fluoro Rubber, Encapsulated in PFA A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal SLKS, HCKS	A 21	Adaptor	AII	Elucro Pubbor Epoppoulated in PEA
A33 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroplastomer Seal SLKS, HCKS	A31 	Spring		Fluoro Rubber, Encapsulated in PFA
A33 O-ring SLKS, HCKS FFKM Perfluoroelastomer Seal A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal	, 102		S9VS, SLVS, HCVS	Fluoropolymer Seal
A34 O-ring S9VS, SLVS, HCVS Fluoropolymer Seal SLKS, HCKS FFKM Perfluoroelastomer Seal	A33	O-ring	SLKS, HCKS	FFKM Perfluoroelastomer Seal
SLKS, HCKS FFKM Perfluoroelastomer Seal	124	Orring	S9VS, SLVS, HCVS	Fluoropolymer Seal
	7,34	C-mig	SLKS, HCKS	FFKM Perfluoroelastomer Seal

Valve Selection

Flow Characteristic



Applicable Standards

DeZURIK VPB V-Port Ball Valves are designed and/or tested to meet the following standards:						
ASME B16.10	Face-to-Face dimensions, short pattern requirements					
ASME B16.34	Body Wall Thickness and Pressure/temperature ratings for Class 150 and 300 Valves					
ASME B16.5	Flange dimensions conform to Pipe flanges and Flanged Fittings for Class 150 and 300					
ANSI/FCI 70.2	Control valve seat leakage					
EN 558-1 PN 10/16	Basic Series 3, Face-to-Face dimensions					
IEC 534-3-2 F-F	Face-to-Face dimensions, Industrial Process Control Valves					
ANSI/ISA-75.02	Control Valve Capacity Test Procedures					
ANSI/ISA-75.08.02	Face-to-Face dimensions for Flanged and Flangeless Rotary Control Valves					
ISO 5211/1 & 2	Part-turn valve actuator attachment, Part 1: Flange dimensions and Part 2: Flange and Coupling performance characteristics					
ISO 5752 PN 10/16	Basic Series 3, Face-to-Face dimensions					
MSS-SP-25	Data Plate and body identification conform to marking requirements					

Flow Parameters

Valve	Сv*/Кv* 100% Ореп					
Size	Flexible Metal & Rigid Metal Seats	Reinforced PTFE & Clearance Seats				
<u>1"</u>	<u>36</u>	<u>40</u>				
25mm	31	35				
<u>1.5"</u>	<u>120</u>	<u>135</u>				
40mm	104	117				
<u>2"</u>	<u>210</u>	<u>235</u>				
50mm	182	203				
<u>2.5"</u>	<u>260</u>	<u>295</u>				
65mm	225	255				
<u>3"</u>	<u>360</u>	<u>420</u>				
80mm	311	363				
<u>4"</u>	<u>600</u>	<u>690</u>				
100mm	519	597				
<u>6"</u>	<u>1230</u>	<u>1290</u>				
150mm	1064	1116				
<u>8"</u>	<u>2015</u>	<u>2190</u>				
200mm	1743	1894				
<u>10"</u>	<u>3000</u>	<u>3180</u>				
250mm	2595	2751				
<u>12"</u>	<u>4225</u>	<u>4390</u>				
300mm	3655	3797				
<u>14"</u>	<u>5830</u>	<u>6060</u>				
350mm	5043	5242				
<u>16"</u>	7500	<u>7770</u>				
400mm	6488	6721				
<u>18"</u>	<u>9500</u>	<u>9840</u>				
450mm	8218	8512				
<u>20"</u>	<u>12000</u>	<u>12430</u>				
500mm	10380	10752				

Valve Weights

		Class 300		
Valve Size	Flanged (F1S & F1A)	Flangeless (W1S)	Add for Long Body (F1L)	Flanged (F2S)
<u>1"</u>	<u>12</u>	<u>9</u>	<u>0.5</u>	<u>15</u>
25mm	6	5	1	7
<u>1.5"</u>	<u>17</u>	<u>12</u>	<u>2.0</u>	<u>24</u>
40mm	8	6	1	11
<u>2"</u>	<u>21</u>	<u>13</u>	<u>2.8</u>	<u>27</u>
50mm	10	6	2	13
<u>2.5"</u>	<u>32</u>	<u>20</u>	_	<u>40</u>
65mm	15	10		19
<u>3"</u>	<u>47</u>	<u>35</u>	<u>3.3</u>	<u>58</u>
80mm	22	16	2	27
<u>4"</u>	<u>63</u>	<u>42</u>	<u>3.5</u>	<u>79</u>
100mm	29	20	2	36
<u>6"</u>	<u>95</u>	<u>74</u>	<u>10.5</u>	<u>142</u>
150mm	44	34	5	65
<u>8"</u>	<u>152</u>	<u>116</u>	<u>15.3</u>	<u>208</u>
200mm	69	53	7	95
<u>10"</u>	<u>236</u>	<u>182</u>	<u>17.5</u>	<u>342</u>
250mm	108	83	8	156
<u>12"</u>	<u>368</u>	<u>314</u>	<u>11.3</u>	<u>516</u>
300mm	167	143	6	235
<u>14"</u> 350mm	<u>560</u> 255	—	—	—
<u>16"</u> 400mm	<u>695</u> 316	_	—	—
<u>18"</u> 450mm	<u>890</u> 404	_	_	_
<u>20"</u> 500mm	<u>1105</u> 501	_	_	_

 $^{*}Cv$ = Flow in GPM of water at 1 psi pressure drop. Kv = Flow in m3/hr. of water at 100 kPa pressure drop.

Pounds Kilograms

Valve Selection

Shut-Off Capabilities

Seat type	Flow	Shut-Off Class (ANSI /FCI 70-2)			
Flexible Metal*	Bi-Directional	IV			
Rigid Metal	Uni-Directional	IV			
Reinforced PTFE**	Uni-Directional	VI			
Clearance Seat	Bi-Directional	5% of max flow when closed			

Pressure Ratings



Flex Metal^{*}, Rigid Metal and Clearance Seats (S3, S3R, S35, S3RI, S3SI, HCRI)

- NOTE: Uni-directional valves must be installed with flow-to-open (forward flow; flow into the convex side of ball). Flow-to-open is the preferred direction for bi-directional valves. Seats are rated to the full valve pressure rating unless noted below.
- * Flexible metal seats are rated to 150 psi (1030kPa) pressure differential when installed in the flow-toclose direction.
- ** Reinforced PTFE seats are rated to 285 psi (1895 kPa) maximum shutoff pressure differential.

Ordering

To order, simply complete the valve order code from information shown. An ordering example is shown for your reference.

Valve Style

Give valve style code as follows:

VPB V-Port Ball Valve

Valve Size Give valve size code as follows:										
1	=	1"	(25mm)	8	=	8"	(200mm)			
1.5	=	1.5"	(40mm)	10	=	10"	(250mm)			
2	=	2"	(50mm)	12	=	12"	(300mm)			
2.5	=	2.5"	(65mm)	14	=	14"	(350mm)			
3	=	3"	(80mm)	16	=	16"	(400mm)			
4	=	4"	(100mm)	18	=	18"	(450mm)			
6	=	6"	(150mm)	20	=	20"	(500mm)			

End Connection

Give end connection code as follows:

Flangeless

- Class 150, ANSI/ISA-75 08 02 and IEC 534-3-2-E 1-12" valves W1S Flanged
- Class 150, ANSI/ISA-75.08.02 and IEC 534-3-2F-F F1S 1-20" valves
- Class 300, ANSI/ISA-75.08.02 and IEC 534-3-2F-F F2S _ 1-12" valves
- Class 150, ASME B16.10, ISO 5752 and EN 558-1 PN 10/16. F1L 1-12" valves
- Class 150, ASME B16.10, ISO 5752 and EN 558-1 PN 10/16 F1A (Long body) 1-12" excluding 2.5" valve size.

Body Material

Give body material code as follows:

- 317 stainless steel (Class 150 only) S3 bodies must be S3 ordered with S3NH or S3S ball , S10 shaft and S3, S3S, S3R or RT seat.
- CS Carbon Steel. CS bodies must be ordered with S3NH or S3S ball, S10 shaft, and S3, S3S, S3R or RT seat.
- 316 stainless steel (Class 300 only). S2 bodies must be S2 = ordered with S3NH or S3S ball, S5 or S10 shaft, and either S3, S3S, S3R or RT seat.
- Hastelloy C. HC body must be ordered with HCNH ball, HC = HCC or TNC shaft, HCRI or RT seat, and HC, HCVS or HCKS bearings.

Packing Material

- Give packing material code as follows:
- тс PTFE Chevron, to 500°F (260°C)
- Braided carbon graphite, to 1000°F (540°C) G2 (Available with S3 seat and S9 or SL bearings)

Trim Combination

Give ball, shaft, seat and bearing codes as follows: S3NH = 317 stainless steel heat treated nickel overlay, to 700°F (370°C) 317 stainless steel with tungsten carbide overlay, to 1000°F (540°C) (Available S3S =

with S3S, S3SI or S3 seats only) HCNH = Hastelloy C with heat treated electroless nickel overlay, to 700°F (370°C)

Shaft Material

- 2205 Duplex stainless steel S10 =
- S5 17-4 PH stainless steel
- HCC Hastelloy C Ceramic Coated (HC Bearings only) = TNC =
 - Titanium Ceramic Coated

Seat Material

- Reinforced PTFE, to 500°F (260°C) RT
- **S**3 = Flexible 317 stainless steel with heat treated electroless nickel overlay, to 700°F (370°C)
- S5C Clearance Seat, 17-4PH Stainless Steel to 1000°F (540°C)
- Rigid 317 stainless steel with heat treated nickel overlay, to 450°F (230°C) S3R = S3S _ Rigid 317 stainless steel with tungsten carbide overlay, to 450°F (230°C)
- (Available with S3S Ball only) S3RI = Rigid 317 stainless steel with heat treated electroless nickel overlay and
- nickel-chromium spring, to 450°F (230°C) S3SI Rigid 317 stainless steel with tungsten carbide overlay and
- nickel-chromium alloy spring, to 450°F (230°C) HCRI = Rigid Hastelloy C with heat treated electroless nickel overlay and nickel-chromium alloy spring, to 450°F (230°C)

Bearing Material

- FT 317 stainless steel wire mesh reinforced PTFE, to 500°F (260°C)
- **S**9 440C stainless steel bearings, to 1000°F (540°C)
- S9VS = 440C stainless steel bearings with PFA Fluoropolymer seal to 450°F (230°C)
- SI Solid Cobalt-Chromium Alloy, to 1000°F (540°C)
- = SIVS Solid Cobalt-Chromium Alloy with PFA Fluoropolymer seal, to 450°F (230°C) SLKS Solid Cobalt-Chromium Alloy with FFKM Perfluoroelastomer seal, = to 550°F (288°C)

On Application

- HC Hastelloy C 1000°F (540°C)
- HCVS Hastelloy C with PFA Fluoropolymer seal, to 450°F (230°C)
- HCKS Hastelloy C with FFKM Perfluoroelastomer seal, to 550°F (288°C)

On Application Give options code as follows:

- BAA Buy American Act
- CMC Certificate of Material Conformance = CRT =
- Certified Material Physical & Chemical Test Report DTR DeZURIK Standard Certified Production Hydrostatic Shell & Seat Test Report =
- ST3 =
 - Pennsylvania Steel Procurement Act DIN 10 or BS4504/10 Drilling (W1S, F1L & F1S only) =
- G1 G2 DIN 16 or BS4504/16 Drilling (W1S, F1L & F1S only) =
- G3 DIN 25 or BS4504/25 Drilling (F2S only) =
- G4 DIN 40 or BS4504/40 Drilling (F2S only) =
- J1 J1S 10 Flange Drilling (F1L or F1S only) =
 - J1S 16 Flange Drilling (F1L or F1S only)
- .12 J1S 20 Flange Drilling (F2S only)

On Application

J6

Pressure Equipment Directive (CE Mark)

Ordering Example

VPB,4,F1L,S3,TC,S3NH-S10-RT-FT,G1*PR-R1A-PC4

Actuators

Manual Gear Actuators

Manual gear actuators with handwheel or chainwheel input are available in cast iron construction. They feature sintered bronze bearings on each end of the input shaft for durability and performance.



Cylinder Actuators

PowerRac[®] Cylinder actuators are available as double-acting or spring return. They feature a high opening torque for on-off applications and also maintain a high operating torque throughout the full stroke for modulating service.

Diaphragm Actuators

Diaphragm actuators may be specified also. They're available with 40, 55, 85, 125, 145 and 250 square inch (0.026m², 0.036m², 0.055m², 0.094m², 0.161m²) sizes and with 20, 35 or 60 psi (140, 240 or 410 kPa) spring options.



Dimensions







Basic Valve

						J					
Valve Size	ANSI/ISA IEC	ASME ISO EN	С	D	E	Flanged Class 150	Flangeless Class 150	Flanged Class 300	N	P Diameter	P Square
<u>1"</u>	<u>4.00</u>	<u>5.00</u>	<u>2.75</u>	<u>3.25</u>	<u>5.62</u>	<u>4.25</u>	<u>2.44</u>	<u>4.88</u>	<u>1.75</u>	<u>.62</u>	<u>.50</u>
25mm	102	127	70	83	143	108	62	124	44	16	13
<u>1.5"</u>	<u>4.50</u>	<u>6.50</u>	<u>2.94</u>	<u>3.47</u>	<u>5.84</u>	<u>5.00</u>	<u>3.06</u>	<u>6.12</u>	<u>1.75</u>	<u>.62</u>	<u>.50</u>
40mm	114	165	75	88	148	127	78	155	44	16	13
<u>2"</u>	<u>4.88</u>	<u>7.00</u>	<u>3.22</u>	<u>3.75</u>	<u>6.12</u>	<u>6.00</u>	<u>3.81</u>	<u>6.50</u>	<u>1.75</u>	<u>.62</u>	<u>.50</u>
50mm	124	178	82	95	155	152	97	165	44	16	13
<u>2.5"</u>	<u>5.50</u>	<u>7.50</u>	<u>3.75</u>	<u>4.44</u>	<u>6.94</u>	<u>7.00</u>	<u>4.38</u>	<u>7.50</u>	<u>1.75</u>	<u>.75</u>	<u>.62</u>
65mm	140	191	95	113	176	178	111	190	44	19	16
<u>3"</u>	<u>6.50</u>	<u>8.00</u>	<u>4.00</u>	<u>4.69</u>	<u>7.19</u>	<u>7.50</u>	<u>5.19</u>	<u>8.25</u>	<u>1.75</u>	<u>.75</u>	<u>.62</u>
80mm	165	203	102	119	183	191	132	210	44	19	16
<u>4"</u>	<u>7.62</u>	<u>9.00</u>	<u>4.56</u>	<u>5.25</u>	<u>7.75</u>	<u>9.00</u>	<u>6.38</u>	<u>10.00</u>	<u>1.75</u>	<u>.75</u>	<u>.62</u>
100mm	194	229	116	133	197	229	162	254	44	19	16
<u>6"</u>	<u>9.00</u>	<u>10.50</u>	<u>5.72</u>	<u>6.50</u>	<u>9.50</u>	<u>11.00</u>	<u>8.50</u>	<u>12.50</u>	<u>1.75</u>	<u>1.25</u>	<u>.94*</u>
150mm	229	267	145	165	241	279	216	317	44	32	24
<u>8"</u>	<u>9.56</u>	<u>11.50</u>	<u>7.28</u>	<u>8.12</u>	<u>11.12</u>	<u>13.50</u>	<u>10.62</u>	<u>15.00</u>	<u>1.75</u>	<u>1.50</u>	<u>1.19</u>
200mm	243	292	185	206	282	343	270	381	44	38	30
<u>10"</u>	<u>11.69</u>	<u>13.00</u>	<u>8.91</u>	<u>9.50</u>	<u>13.38</u>	<u>16.00</u>	<u>13.12</u>	<u>17.50</u>	<u>1.75</u>	<u>2.00</u>	<u>1.62</u> **
250mm	297	330	226	241	340	406	333	444	44	51	41
<u>12"</u>	<u>13.31</u>	<u>14.00</u>	<u>9.91</u>	<u>10.50</u>	<u>14.38</u>	<u>19.00</u>	<u>15.38</u>	<u>20.50</u>	<u>1.75</u>	<u>2.00</u>	<u>1.62</u>
300mm	338	356	252	267	365	483	391	521	44	51	41
<u>14"</u> 350mm	<u>15.75</u> 400		<u>10.86</u> 276	<u>11.47</u> 291	<u>15.34</u> 390	<u>21.00</u> 533	_		<u>1.75</u> 44	<u>2.00</u> 51	<u>1.62</u> 41
<u>16"</u> 400mm	<u>15.75</u> 400		<u>13.25</u> 337	<u>14.06</u> 375	<u>18.56</u> 471	<u>23.50</u> 597			<u>1.75</u> 44	<u>2.50</u> 64	<u>1.81</u> 46
<u>18"</u> 450mm	<u>18.00</u> 457		<u>14.44</u> 367	<u>15.25</u> 387	<u>19.75</u> 502	<u>25.00</u> 635			<u>1.75</u> 44	<u>2.50</u> 64	<u>1.81</u> 46
<u>20"</u> 500mm	<u>20.00</u> 508		<u>15.56</u> 395	<u>16.38</u> 416	<u>20.38</u> 518	<u>27.50</u> 686	_		<u>1.75</u> 44	<u>2.50</u> 64	<u>1.81</u> 46

Note: All dimensions are subject to change without notice. Request certified drawings for use in preparing piping layouts. *6" (150mm) <u>.88</u> for DR-40 actuators

Inches Millimeters

**10" (250mm) $\frac{1.19}{30}$ for DR-85 actuators

Sales and Service

For information about our worldwide locations, approvals, certifications and local representative: Web Site: www.dezurik.com E-Mail: info@dezurik.com



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