

High precision short drill for stainless steels

## VA-PDS-SUS

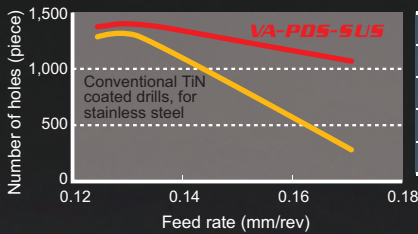
Series  
Expansion

# 'Violet' drill range expanded.

$\phi 0.5 \rightarrow \phi 20.0$

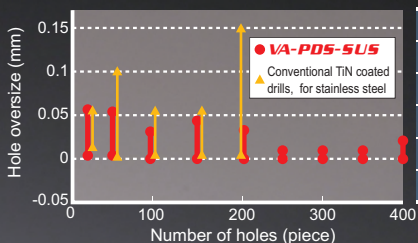


### ● Stable tool life



Drill	VA-PDS-SUS $\phi 6.0$
Work material	AISI 304
Revolution	800min <sup>-1</sup> (15m/min)
Drilling depth	16mm through
Coolant	Emulsion

### ● High precision drilling!



Drill	VA-PDS-SUS $\phi 10.0$
Work material	AISI 304
Revolution	480min <sup>-1</sup> (15m/min)
Feed rate	0.22mm/rev
Drilling depth	16mm through
Coolant	Emulsion

### ● High efficiency drilling!

Newly developed point geometry for excellent chip breaking.

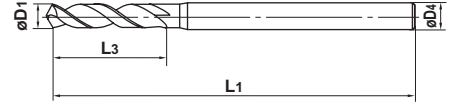
# VIOLET DRILLS

## VA-PDS-SUS Expand

Short, High precision, For stainless steel



All drills except those with intervals of 0.1mm and under dia. 4mm have a tolerance of 0—0.009mm.



1 ≤ D1

- New design and the Violet coating combination enable high efficiency drilling and long tool life for drilling of stainless steels.

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSSUSD0050	0.5	3	50	3	●
D0051	0.51	3	50	3	●
D0052	0.52	3	50	3	●
D0053	0.53	3	50	3	●
D0054	0.54	3	50	3	●
D0055	0.55	3	50	3	●
D0056	0.56	4	50	3	●
D0057	0.57	4	50	3	●
D0058	0.58	4	50	3	●
D0059	0.59	4	50	3	●
D0060	0.6	5	50	3	●
D0061	0.61	5	50	3	●
D0062	0.62	5	50	3	●
D0063	0.63	5	50	3	●
D0064	0.64	5	50	3	●
D0065	0.65	5	50	3	●
D0066	0.66	5	50	3	●
D0067	0.67	5	50	3	●
D0068	0.68	5	50	3	●
D0069	0.69	5	50	3	●
D0070	0.7	5	50	3	●
D0071	0.71	5	50	3	●
D0072	0.72	5	50	3	●
D0073	0.73	5	50	3	●
D0074	0.74	5	50	3	●
D0075	0.75	5	50	3	●
D0076	0.76	5	50	3	●
D0077	0.77	5	50	3	●
D0078	0.78	5	50	3	●
D0079	0.79	5	50	3	●
D0080	0.8	5	50	3	●
D0081	0.81	5	50	3	●
D0082	0.82	5	50	3	●
D0083	0.83	5	50	3	●
D0084	0.84	5	50	3	●
D0085	0.85	5	50	3	●
D0086	0.86	6	50	3	●
D0087	0.87	6	50	3	●
D0088	0.88	6	50	3	●
D0089	0.89	6	50	3	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSSUSD0090	0.9	6	50	3	●
D0091	0.91	6	50	3	●
D0092	0.92	6	50	3	●
D0093	0.93	6	50	3	●
D0094	0.94	6	50	3	●
D0095	0.95	6	50	3	●
D0096	0.96	6	50	3	●
D0097	0.97	6	50	3	●
D0098	0.98	6	50	3	●
D0099	0.99	6	50	3	●
D0100	1.0	6	50	3	●
D0101	1.01	6	50	3	●
D0102	1.02	6	50	3	●
D0103	1.03	6	50	3	●
D0104	1.04	6	50	3	●
D0105	1.05	6	50	3	●
D0106	1.06	6	50	3	●
D0107	1.07	8	55	3	●
D0108	1.08	8	55	3	●
D0109	1.09	8	55	3	●
D0110	1.1	8	55	3	●
D0111	1.11	8	55	3	●
D0112	1.12	8	55	3	●
D0113	1.13	8	55	3	●
D0114	1.14	8	55	3	●
D0115	1.15	8	55	3	●
D0116	1.16	8	55	3	●
D0117	1.17	8	55	3	●
D0118	1.18	8	55	3	●
D0119	1.19	8	55	3	●
D0120	1.2	8	55	3	●
D0121	1.21	8	55	3	●
D0122	1.22	8	55	3	●
D0123	1.23	8	55	3	●
D0124	1.24	8	55	3	●
D0125	1.25	8	55	3	●
D0126	1.26	8	55	3	●
D0127	1.27	8	55	3	●
D0128	1.28	8	55	3	●
D0129	1.29	8	55	3	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
<b>VAPDSSUSD0130</b>	1.3	9	55	3	●
<b>D0131</b>	1.31	9	55	3	●
<b>D0132</b>	1.32	9	55	3	●
<b>D0133</b>	1.33	9	55	3	●
<b>D0134</b>	1.34	9	55	3	●
<b>D0135</b>	1.35	9	55	3	●
<b>D0136</b>	1.36	9	55	3	●
<b>D0137</b>	1.37	9	55	3	●
<b>D0138</b>	1.38	9	55	3	●
<b>D0139</b>	1.39	9	55	3	●
<b>D0140</b>	1.4	9	55	3	●
<b>D0141</b>	1.41	9	55	3	●
<b>D0142</b>	1.42	9	55	3	●
<b>D0143</b>	1.43	9	55	3	●
<b>D0144</b>	1.44	9	55	3	●
<b>D0145</b>	1.45	9	55	3	●
<b>D0146</b>	1.46	9	55	3	●
<b>D0147</b>	1.47	9	55	3	●
<b>D0148</b>	1.48	9	55	3	●
<b>D0149</b>	1.49	9	55	3	●
<b>D0150</b>	1.5	9	55	3	●
<b>D0151</b>	1.51	11	55	3	●
<b>D0152</b>	1.52	11	55	3	●
<b>D0153</b>	1.53	11	55	3	●
<b>D0154</b>	1.54	11	55	3	●
<b>D0155</b>	1.55	11	55	3	●
<b>D0156</b>	1.56	11	55	3	●
<b>D0157</b>	1.57	11	55	3	●
<b>D0158</b>	1.58	11	55	3	●
<b>D0159</b>	1.59	11	55	3	●
<b>D0160</b>	1.6	11	55	3	●
<b>D0161</b>	1.61	11	55	3	●
<b>D0162</b>	1.62	11	55	3	●
<b>D0163</b>	1.63	11	55	3	●
<b>D0164</b>	1.64	11	55	3	●
<b>D0165</b>	1.65	11	55	3	●
<b>D0166</b>	1.66	11	55	3	●
<b>D0167</b>	1.67	11	55	3	●
<b>D0168</b>	1.68	11	55	3	●
<b>D0169</b>	1.69	11	55	3	●
<b>D0170</b>	1.7	11	55	3	●
<b>D0171</b>	1.71	11	55	3	●
<b>D0172</b>	1.72	11	55	3	●
<b>D0173</b>	1.73	11	55	3	●
<b>D0174</b>	1.74	11	55	3	●
<b>D0175</b>	1.75	11	55	3	●
<b>D0176</b>	1.76	11	55	3	●
<b>D0177</b>	1.77	11	55	3	●
<b>D0178</b>	1.78	11	55	3	●
<b>D0179</b>	1.79	11	55	3	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
<b>VAPDSSUSD0180</b>	1.8	11	55	3	●
<b>D0181</b>	1.81	11	55	3	●
<b>D0182</b>	1.82	11	55	3	●
<b>D0183</b>	1.83	11	55	3	●
<b>D0184</b>	1.84	11	55	3	●
<b>D0185</b>	1.85	11	55	3	●
<b>D0186</b>	1.86	11	55	3	●
<b>D0187</b>	1.87	11	55	3	●
<b>D0188</b>	1.88	11	55	3	●
<b>D0189</b>	1.89	11	55	3	●
<b>D0190</b>	1.9	12	55	3	●
<b>D0191</b>	1.91	12	60	3	●
<b>D0192</b>	1.92	12	60	3	●
<b>D0193</b>	1.93	12	60	3	●
<b>D0194</b>	1.94	12	60	3	●
<b>D0195</b>	1.95	12	60	3	●
<b>D0196</b>	1.96	12	60	3	●
<b>D0197</b>	1.97	12	60	3	●
<b>D0198</b>	1.98	12	60	3	●
<b>D0199</b>	1.99	12	60	3	●
<b>D0200</b>	2.0	12	60	3	●
<b>D0201</b>	2.01	12	60	3	●
<b>D0202</b>	2.02	12	60	3	●
<b>D0203</b>	2.03	12	60	3	●
<b>D0204</b>	2.04	12	60	3	●
<b>D0205</b>	2.05	12	60	3	●
<b>D0206</b>	2.06	12	60	3	●
<b>D0207</b>	2.07	12	60	3	●
<b>D0208</b>	2.08	12	60	3	●
<b>D0209</b>	2.09	12	60	3	●
<b>D0210</b>	2.1	12	60	3	●
<b>D0211</b>	2.11	12	60	3	●
<b>D0212</b>	2.12	12	60	3	●
<b>D0213</b>	2.13	12	60	3	●
<b>D0214</b>	2.14	12	60	3	●
<b>D0215</b>	2.15	12	60	3	●
<b>D0216</b>	2.16	12	60	3	●
<b>D0217</b>	2.17	12	60	3	●
<b>D0218</b>	2.18	12	60	3	●
<b>D0219</b>	2.19	12	60	3	●
<b>D0220</b>	2.2	12	60	3	●
<b>D0221</b>	2.21	12	60	3	●
<b>D0222</b>	2.22	12	60	3	●
<b>D0223</b>	2.23	12	60	3	●
<b>D0224</b>	2.24	12	60	3	●
<b>D0225</b>	2.25	12	60	3	●
<b>D0226</b>	2.26	12	60	3	●
<b>D0227</b>	2.27	12	60	3	●
<b>D0228</b>	2.28	12	60	3	●
<b>D0229</b>	2.29	12	60	3	●

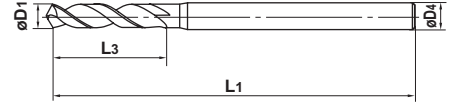
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1 ≤ D1

- New design and the Violet coating combination enable high efficiency drilling and long tool life for drilling of stainless steels.

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSSUSD0230	2.3	13	60	3	●
D0231	2.31	13	60	3	●
D0232	2.32	13	60	3	●
D0233	2.33	13	60	3	●
D0234	2.34	13	60	3	●
D0235	2.35	13	60	3	●
D0236	2.36	13	60	3	●
D0237	2.37	13	60	3	●
D0238	2.38	13	60	3	●
D0239	2.39	13	60	3	●
D0240	2.4	13	60	3	●
D0241	2.41	13	60	3	●
D0242	2.42	13	60	3	●
D0243	2.43	13	60	3	●
D0244	2.44	13	60	3	●
D0245	2.45	13	60	3	●
D0246	2.46	13	60	3	●
D0247	2.47	13	60	3	●
D0248	2.48	13	60	3	●
D0249	2.49	13	60	3	●
D0250	2.5	13	60	3	●
D0251	2.51	13	60	3	●
D0252	2.52	13	60	3	●
D0253	2.53	13	60	3	●
D0254	2.54	13	60	3	●
D0255	2.55	13	60	3	●
D0256	2.56	13	60	3	●
D0257	2.57	13	60	3	●
D0258	2.58	13	60	3	●
D0259	2.59	13	60	3	●
D0260	2.6	15	60	3	●
D0261	2.61	15	60	3	●
D0262	2.62	15	60	3	●
D0263	2.63	15	60	3	●
D0264	2.64	15	60	3	●
D0265	2.65	15	60	3	●
D0266	2.66	15	60	3	●
D0267	2.67	15	60	3	●
D0268	2.68	15	60	3	●
D0269	2.69	15	60	3	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSSUSD0270	2.7	15	60	3	●
D0271	2.71	15	60	3	●
D0272	2.72	15	60	3	●
D0273	2.73	15	60	3	●
D0274	2.74	15	60	3	●
D0275	2.75	15	60	3	●
D0276	2.76	15	60	3	●
D0277	2.77	15	60	3	●
D0278	2.78	15	60	3	●
D0279	2.79	15	60	3	●
D0280	2.8	15	60	3	●
D0281	2.81	15	60	3	●
D0282	2.82	15	60	3	●
D0283	2.83	15	60	3	●
D0284	2.84	15	60	3	●
D0285	2.85	15	60	3	●
D0286	2.86	15	60	3	●
D0287	2.87	15	60	3	●
D0288	2.88	15	60	3	●
D0289	2.89	15	60	3	●
D0290	2.9	15	60	3	●
D0291	2.91	15	60	3	●
D0292	2.92	15	60	3	●
D0293	2.93	15	60	3	●
D0294	2.94	15	60	3	●
D0295	2.95	15	60	3	●
D0296	2.96	15	60	3	●
D0297	2.97	15	60	3	●
D0298	2.98	15	60	3	●
D0299	2.99	15	60	3	●
D0300	3.0	15	60	3	●
D0301	3.01	17	70	4	●
D0302	3.02	17	70	4	●
D0303	3.03	17	70	4	●
D0304	3.04	17	70	4	●
D0305	3.05	17	70	4	●
D0306	3.06	17	70	4	●
D0307	3.07	17	70	4	●
D0308	3.08	17	70	4	●
D0309	3.09	17	70	4	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
<b>VAPDSSUSD0310</b>	3.1	17	70	4	●
<b>D0311</b>	3.11	17	70	4	●
<b>D0312</b>	3.12	17	70	4	●
<b>D0313</b>	3.13	17	70	4	●
<b>D0314</b>	3.14	17	70	4	●
<b>D0315</b>	3.15	17	70	4	●
<b>D0316</b>	3.16	17	70	4	●
<b>D0317</b>	3.17	17	70	4	●
<b>D0318</b>	3.18	17	70	4	●
<b>D0319</b>	3.19	17	70	4	●
<b>D0320</b>	3.2	17	70	4	●
<b>D0321</b>	3.21	17	70	4	●
<b>D0322</b>	3.22	17	70	4	●
<b>D0323</b>	3.23	17	70	4	●
<b>D0324</b>	3.24	17	70	4	●
<b>D0325</b>	3.25	17	70	4	●
<b>D0326</b>	3.26	17	70	4	●
<b>D0327</b>	3.27	17	70	4	●
<b>D0328</b>	3.28	17	70	4	●
<b>D0329</b>	3.29	17	70	4	●
<b>D0330</b>	3.3	19	70	4	●
<b>D0331</b>	3.31	19	70	4	●
<b>D0332</b>	3.32	19	70	4	●
<b>D0333</b>	3.33	19	70	4	●
<b>D0334</b>	3.34	19	70	4	●
<b>D0335</b>	3.35	19	70	4	●
<b>D0336</b>	3.36	19	70	4	●
<b>D0337</b>	3.37	19	70	4	●
<b>D0338</b>	3.38	19	70	4	●
<b>D0339</b>	3.39	19	70	4	●
<b>D0340</b>	3.4	19	70	4	●
<b>D0341</b>	3.41	19	70	4	●
<b>D0342</b>	3.42	19	70	4	●
<b>D0343</b>	3.43	19	70	4	●
<b>D0344</b>	3.44	19	70	4	●
<b>D0345</b>	3.45	19	70	4	●
<b>D0346</b>	3.46	19	70	4	●
<b>D0347</b>	3.47	19	70	4	●
<b>D0348</b>	3.48	19	70	4	●
<b>D0349</b>	3.49	19	70	4	●
<b>D0350</b>	3.5	19	70	4	●
<b>D0351</b>	3.51	19	70	4	●
<b>D0352</b>	3.52	19	70	4	●
<b>D0353</b>	3.53	19	70	4	●
<b>D0354</b>	3.54	19	70	4	●
<b>D0355</b>	3.55	19	70	4	●
<b>D0356</b>	3.56	19	70	4	●
<b>D0357</b>	3.57	19	70	4	●
<b>D0358</b>	3.58	19	70	4	●
<b>D0359</b>	3.59	19	70	4	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
<b>VAPDSSUSD0360</b>	3.6	21	70	4	●
<b>D0361</b>	3.61	21	70	4	●
<b>D0362</b>	3.62	21	70	4	●
<b>D0363</b>	3.63	21	70	4	●
<b>D0364</b>	3.64	21	70	4	●
<b>D0365</b>	3.65	21	70	4	●
<b>D0366</b>	3.66	21	70	4	●
<b>D0367</b>	3.67	21	70	4	●
<b>D0368</b>	3.68	21	70	4	●
<b>D0369</b>	3.69	21	70	4	●
<b>D0370</b>	3.7	21	70	4	●
<b>D0371</b>	3.71	21	70	4	●
<b>D0372</b>	3.72	21	70	4	●
<b>D0373</b>	3.73	21	70	4	●
<b>D0374</b>	3.74	21	70	4	●
<b>D0375</b>	3.75	21	70	4	●
<b>D0376</b>	3.76	21	70	4	●
<b>D0377</b>	3.77	21	70	4	●
<b>D0378</b>	3.78	21	70	4	●
<b>D0379</b>	3.79	21	70	4	●
<b>D0380</b>	3.8	21	70	4	●
<b>D0381</b>	3.81	21	70	4	●
<b>D0382</b>	3.82	21	70	4	●
<b>D0383</b>	3.83	21	70	4	●
<b>D0384</b>	3.84	21	70	4	●
<b>D0385</b>	3.85	21	70	4	●
<b>D0386</b>	3.86	21	70	4	●
<b>D0387</b>	3.87	21	70	4	●
<b>D0388</b>	3.88	21	70	4	●
<b>D0389</b>	3.89	21	70	4	●
<b>D0390</b>	3.9	21	70	4	●
<b>D0391</b>	3.91	21	70	4	●
<b>D0392</b>	3.92	21	70	4	●
<b>D0393</b>	3.93	21	70	4	●
<b>D0394</b>	3.94	21	70	4	●
<b>D0395</b>	3.95	21	70	4	●
<b>D0396</b>	3.96	21	70	4	●
<b>D0397</b>	3.97	21	70	4	●
<b>D0398</b>	3.98	21	70	4	●
<b>D0399</b>	3.99	21	70	4	●
<b>D0400</b>	4.0	21	70	4	●
<b>D0405</b>	4.05	21	80	6	●
<b>D0410</b>	4.1	21	80	6	●
<b>D0415</b>	4.15	21	80	6	●
<b>D0420</b>	4.2	21	80	6	●
<b>D0425</b>	4.25	21	80	6	●
<b>D0430</b>	4.3	23	80	6	●
<b>D0435</b>	4.35	23	80	6	●
<b>D0440</b>	4.4	23	80	6	●
<b>D0445</b>	4.45	23	80	6	●

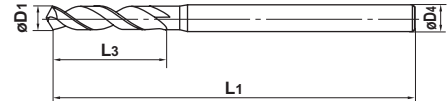
# VIOLET DRILLS

## VA-PDS-SUS Expand

Short, High precision, For stainless steel



All drills except those with intervals of 0.1mm and under dia. 4mm have a tolerance of 0—0.009mm.



1 ≤ D1

- New design and the Violet coating combination enable high efficiency drilling and long tool life for drilling of stainless steels.

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSSUSD0450	4.5	23	80	6	●
D0455	4.55	23	80	6	●
D0460	4.6	25	80	6	●
D0465	4.65	25	80	6	●
D0470	4.7	25	80	6	●
D0475	4.75	25	80	6	●
D0480	4.8	25	80	6	●
D0485	4.85	25	80	6	●
D0490	4.9	25	80	6	●
D0495	4.95	25	80	6	●
D0500	5.0	25	80	6	●
D0505	5.05	25	80	6	●
D0510	5.1	25	80	6	●
D0515	5.15	25	80	6	●
D0520	5.2	25	80	6	●
D0525	5.25	25	80	6	●
D0530	5.3	25	80	6	●
D0535	5.35	27	80	6	●
D0540	5.4	27	80	6	●
D0545	5.45	27	80	6	●
D0550	5.5	27	80	6	●
D0555	5.55	27	80	6	●
D0560	5.6	27	80	6	●
D0565	5.65	27	80	6	●
D0570	5.7	27	80	6	●
D0575	5.75	27	80	6	●
D0580	5.8	27	80	6	●
D0585	5.85	27	80	6	●
D0590	5.9	27	80	6	●
D0595	5.95	27	80	6	●
D0600	6.0	27	80	6	●
D0605	6.05	30	80	8	●
D0610	6.1	30	80	8	●
D0615	6.15	30	80	8	●
D0620	6.2	30	80	8	●
D0625	6.25	30	80	8	●
D0630	6.3	30	80	8	●
D0635	6.35	30	80	8	●
D0640	6.4	30	80	8	●
D0645	6.45	30	80	8	●

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSSUSD0650	6.5	30	80	8	●
D0655	6.55	30	80	8	●
D0660	6.6	30	80	8	●
D0665	6.65	30	80	8	●
D0670	6.7	30	80	8	●
D0675	6.75	32	80	8	●
D0680	6.8	32	80	8	●
D0685	6.85	32	80	8	●
D0690	6.9	32	80	8	●
D0695	6.95	32	80	8	●
D0700	7.0	32	80	8	●
D0705	7.05	32	80	8	●
D0710	7.1	32	80	8	●
D0715	7.15	32	80	8	●
D0720	7.2	32	80	8	●
D0725	7.25	32	80	8	●
D0730	7.3	32	80	8	●
D0735	7.35	32	80	8	●
D0740	7.4	32	80	8	●
D0745	7.45	32	80	8	●
D0750	7.5	32	80	8	●
D0755	7.55	35	85	8	●
D0760	7.6	35	85	8	●
D0765	7.65	35	85	8	●
D0770	7.7	35	85	8	●
D0775	7.75	35	85	8	●
D0780	7.8	35	85	8	●
D0785	7.85	35	85	8	●
D0790	7.9	35	85	8	●
D0795	7.95	35	85	8	●
D0800	8.0	35	85	8	●
D0805	8.05	35	90	10	●
D0810	8.1	35	90	10	●
D0815	8.15	35	90	10	●
D0820	8.2	35	90	10	●
D0825	8.25	35	90	10	●
D0830	8.3	35	90	10	●
D0835	8.35	35	90	10	●
D0840	8.4	35	90	10	●
D0845	8.45	35	90	10	●

Unit : mm

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSSUSD0850	8.5	35	90	10	●
D0855	8.55	38	93	10	●
D0860	8.6	38	93	10	●
D0865	8.65	38	93	10	●
D0870	8.7	38	93	10	●
D0875	8.75	38	93	10	●
D0880	8.8	38	93	10	●
D0885	8.85	38	93	10	●
D0890	8.9	38	93	10	●
D0895	8.95	38	93	10	●
D0900	9.0	38	93	10	●
D0910	9.1	38	93	10	●
D0920	9.2	38	93	10	●
D0930	9.3	38	93	10	●
D0940	9.4	38	93	10	●
D0950	9.5	38	93	10	●
D0960	9.6	41	96	10	●
D0970	9.7	41	96	10	●
D0980	9.8	41	96	10	●
D0990	9.9	41	96	10	●
D1000	10.0	41	96	10	●
D1010	10.1	41	101	12	●
D1020	10.2	41	101	12	●
D1030	10.3	41	101	12	●
D1040	10.4	41	101	12	●
D1050	10.5	41	101	12	●
D1060	10.6	41	101	12	●
D1070	10.7	45	105	12	●
D1080	10.8	45	105	12	●
D1090	10.9	45	105	12	●
D1100	11.0	45	105	12	●
D1110	11.1	45	105	12	●
D1120	11.2	45	105	12	●
D1130	11.3	45	105	12	●
D1140	11.4	45	105	12	●
D1150	11.5	45	105	12	●
D1160	11.6	45	105	12	●
D1170	11.7	45	105	12	●
D1180	11.8	45	105	12	●
D1190	11.9	49	109	12	●
D1200	12.0	49	109	12	●
D1210	12.1	49	109	12	●
D1220	12.2	49	109	12	●
D1230	12.3	49	109	12	●
D1240	12.4	49	109	12	●
D1250	12.5	49	109	12	●
D1260	12.6	49	109	12	●
D1270	12.7	49	109	12	●
D1280	12.8	49	109	12	●
D1290	12.9	49	109	12	●

\*Expand

Order Number	Dia. D1	Flute Length L3	Overall Length L1	Shank Dia. D4	Stock
VAPDSSUSD1300	13.0	49	109	12	●
* D1350	13.5	51	111	16	●
* D1400	14.0	51	111	16	●
* D1410	14.1	53	113	16	●
* D1420	14.2	53	113	16	●
* D1450	14.5	53	113	16	●
* D1500	15.0	53	113	16	●
* D1550	15.5	55	115	16	●
* D1560	15.6	55	115	16	●
* D1570	15.7	55	115	16	●
* D1600	16.0	55	115	16	●
* D1650	16.5	57	122	20	●
* D1700	17.0	57	122	20	●
* D1750	17.5	58	123	20	●
* D1760	17.6	58	123	20	●
* D1770	17.7	58	123	20	●
* D1800	18.0	58	123	20	●
* D1850	18.5	60	125	20	●
* D1900	19.0	60	125	20	●
* D1950	19.5	62	127	20	●
* D1960	19.6	62	127	20	●
* D1970	19.7	62	127	20	●
* D2000	20.0	62	127	20	●

## VIOLET SERIES, HIGH PRECISION DRILLS

### VA-PDS

Short flute,  
High precision



### VA-PDM

Medium flute,  
High precision



### VA-PDS-SUS Expand

Short flute,  
High precision,  
For stainless steel



### VA-PDM-SUS

Medium flute,  
High precision,  
For stainless steel



## VA-PDS-SUS

Work material	Stainless steel				Carbon steel AISI 1049 Alloy steel SCM Cast iron FC Copper, Copper alloy	Structural steel Aluminium alloy		
	Austenitic AISI 304, AISI 316		Martensitic Ferritic AISI 430					
Dia. (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/rev)	Revolution (min <sup>-1</sup> )	Feed rate (mm/rev)	Revolution (min <sup>-1</sup> )	Feed rate (mm/rev)	Revolution (min <sup>-1</sup> )	Feed rate (mm/rev)
0.5	7,600	0.01	8,800	0.01	11,250	0.01	15,000	0.02
1.0	4,800	0.02	6,300	0.05	10,000	0.05	12,000	0.05
2.0	2,400	0.04	3,200	0.06	5,500	0.09	6,400	0.09
3.0	1,600	0.07	2,100	0.10	3,700	0.13	4,300	0.13
4.0	1,200	0.09	1,600	0.10	2,800	0.15	3,200	0.15
5.0	950	0.12	1,300	0.13	2,200	0.18	2,600	0.18
6.0	800	0.14	1,100	0.15	1,800	0.20	2,100	0.19
8.0	600	0.18	800	0.18	1,400	0.22	1,600	0.24
10.0	480	0.22	640	0.21	1,100	0.25	1,300	0.28
12.0	400	0.24	530	0.25	930	0.30	1,100	0.34
13.0	370	0.26	490	0.28	860	0.32	1,000	0.36
14.0	340	0.30	450	0.27	730	0.31	930	0.36
15.0	320	0.31	425	0.28	680	0.32	870	0.38
16.0	300	0.32	400	0.30	640	0.34	820	0.42
18.0	270	0.34	350	0.32	570	0.36	725	0.43
20.0	240	0.36	320	0.35	510	0.38	660	0.45

- 1) Please reduce the revolution and feed rate depending on the drilling situation when the installation of workpiece or machine lacks rigidity.
- 2) Please use a collet type drill chuck.
- 3) Use sufficient cutting fluid.
- 4) YC-SSM is recommended for precipitation hardened stainless steels (ASTM 630 and ASTM 631).
- 5) When drilling holes greater than 4 x drill diameter hole depths, please use a peck feed.

The above-mentioned cutting conditions are standard when using water-soluble cutting fluid.  
Please reduce the revolution when using non-water-soluble cutting fluid.

## MITSUBISHI MATERIALS KOBE TOOLS



JQA-2522  
JQA-EM0941

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