

KHR-4

超硬底刃付リーマ Tungsten Carbide Reamer with Bottom Flute

■底刃が付いているので止まり穴の加工などに最適です
Best for stop hole processing due to having bottom flute



被削材 Workpiece					
一般構造鋼 General Structural Steel	炭素鋼 Carbon Steel	合金鋼・工具鋼 Alloy Steel Tool Steel	プリハードン鋼 Pre-Harden Steel	鋳鉄 Cast Iron	アルミ合金 Aluminum Alloy
○	○	○	○	○	○

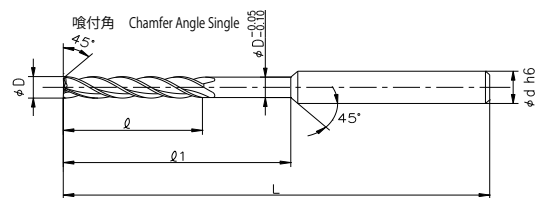
●切削条件表はP277に記載
●Cutting conditions are recommended on page 277.

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4050	0.5	4	10	50	3
KHR-4051	0.51	4	10	50	3
KHR-4052	0.52	4	10	50	3
KHR-4053	0.53	4	10	50	3
KHR-4054	0.54	4	10	50	3
KHR-4055	0.55	4	10	50	3
KHR-4056	0.56	4	10	50	3
KHR-4057	0.57	4	10	50	3
KHR-4058	0.58	4	10	50	3
KHR-4059	0.59	4	10	50	3
KHR-4060	0.6	4	10	50	3
KHR-4061	0.61	4	10	50	3
KHR-4062	0.62	4	10	50	3
KHR-4063	0.63	4	10	50	3
KHR-4064	0.64	4	10	50	3
KHR-4065	0.65	4	10	50	3
KHR-4066	0.66	4	10	50	3
KHR-4067	0.67	4	10	50	3
KHR-4068	0.68	4	10	50	3
KHR-4069	0.69	4	10	50	3
KHR-4070	0.7	4	10	50	3
KHR-4071	0.71	4	10	50	3
KHR-4072	0.72	4	10	50	3
KHR-4073	0.73	4	10	50	3
KHR-4074	0.74	4	10	50	3
KHR-4075	0.75	4	10	50	3
KHR-4076	0.76	4	10	50	3
KHR-4077	0.77	4	10	50	3
KHR-4078	0.78	4	10	50	3
KHR-4079	0.79	5	12	50	3

K10

35°
ネジレ角
Twist Angle

4



●刃径の許容差 Flute Diameter Tolerance
D ≤ 3.09 +0.005~0
3.1 < D ≤ 12.03 +0.007~0

●喰付寸法
C=0.1±0.03 φ0.5~φ1.99
C=0.15±0.03 φ2.0~φ3.09
C=0.2±0.03 φ3.1~φ7.05
C=0.3±0.03 φ7.1~φ10.05
C=0.4±0.03 φ10.1~φ12.03



単位 [寸法:mm]
Unit [size:mm]

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4080	0.8	5	12	50	3
KHR-4081	0.81	5	12	50	3
KHR-4082	0.82	5	12	50	3
KHR-4083	0.83	5	12	50	3
KHR-4084	0.84	5	12	50	3
KHR-4085	0.85	5	12	50	3
KHR-4086	0.86	5	12	50	3
KHR-4087	0.87	5	12	50	3
KHR-4088	0.88	5	12	50	3
KHR-4089	0.89	5	12	50	3
KHR-4090	0.9	5	12	50	3
KHR-4091	0.91	5	12	50	3
KHR-4092	0.92	5	12	50	3
KHR-4093	0.93	5	12	50	3
KHR-4094	0.94	5	12	50	3
KHR-4095	0.95	5	12	50	3
KHR-4096	0.96	5	12	50	3
KHR-4097	0.97	5	12	50	3
KHR-4098	0.98	5	12	50	3
KHR-4099	0.99	5	12	50	3
KHR-4100	1	6	15	60	3
KHR-4101	1.01	6	15	60	3
KHR-4102	1.02	6	15	60	3
KHR-4103	1.03	6	15	60	3
KHR-4104	1.04	6	15	60	3
KHR-4105	1.05	6	15	60	3
KHR-4106	1.06	6	15	60	3
KHR-4107	1.07	6	15	60	3
KHR-4108	1.08	6	15	60	3
KHR-4109	1.09	6	15	60	3

超硬リーマ

Carbide Reamer

KHR-4

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4110	1.1	6	15	60	3
KHR-4111	1.11	6	15	60	3
KHR-4112	1.12	6	15	60	3
KHR-4113	1.13	6	15	60	3
KHR-4114	1.14	6	15	60	3
KHR-4115	1.15	6	15	60	3
KHR-4116	1.16	6	15	60	3
KHR-4117	1.17	6	15	60	3
KHR-4118	1.18	6	15	60	3
KHR-4119	1.19	6	15	60	3
KHR-4120	1.2	6	15	60	3
KHR-4121	1.21	6	15	60	3
KHR-4122	1.22	6	15	60	3
KHR-4123	1.23	6	15	60	3
KHR-4124	1.24	6	15	60	3
KHR-4125	1.25	6	15	60	3
KHR-4126	1.26	6	15	60	3
KHR-4127	1.27	6	15	60	3
KHR-4128	1.28	6	15	60	3
KHR-4129	1.29	6	15	60	3
KHR-4130	1.3	6	15	60	3
KHR-4131	1.31	6	15	60	3
KHR-4132	1.32	6	15	60	3
KHR-4133	1.33	6	15	60	3
KHR-4134	1.34	6	15	60	3
KHR-4135	1.35	6	15	60	3
KHR-4136	1.36	6	15	60	3
KHR-4137	1.37	6	15	60	3
KHR-4138	1.38	6	15	60	3
KHR-4139	1.39	6	15	60	3
KHR-4140	1.4	6	15	60	3
KHR-4141	1.41	6	15	60	3
KHR-4142	1.42	6	15	60	3
KHR-4143	1.43	6	15	60	3
KHR-4144	1.44	6	15	60	3
KHR-4145	1.45	6	15	60	3
KHR-4146	1.46	6	15	60	3
KHR-4147	1.47	6	15	60	3
KHR-4148	1.48	6	15	60	3
KHR-4149	1.49	6	15	60	3
KHR-4150	1.5	8	20	60	3
KHR-4151	1.51	8	20	60	3
KHR-4152	1.52	8	20	60	3
KHR-4153	1.53	8	20	60	3
KHR-4154	1.54	8	20	60	3
KHR-4155	1.55	8	20	60	3
KHR-4156	1.56	8	20	60	3
KHR-4157	1.57	8	20	60	3

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4158	1.58	8	20	60	3
KHR-4159	1.59	8	20	60	3
KHR-4160	1.6	8	20	60	3
KHR-4161	1.61	8	20	60	3
KHR-4162	1.62	8	20	60	3
KHR-4163	1.63	8	20	60	3
KHR-4164	1.64	8	20	60	3
KHR-4165	1.65	8	20	60	3
KHR-4166	1.66	8	20	60	3
KHR-4167	1.67	8	20	60	3
KHR-4168	1.68	8	20	60	3
KHR-4169	1.69	8	20	60	3
KHR-4170	1.7	8	20	60	3
KHR-4171	1.71	8	20	60	3
KHR-4172	1.72	8	20	60	3
KHR-4173	1.73	8	20	60	3
KHR-4174	1.74	8	20	60	3
KHR-4175	1.75	8	20	60	3
KHR-4176	1.76	8	20	60	3
KHR-4177	1.77	8	20	60	3
KHR-4178	1.78	8	20	60	3
KHR-4179	1.79	8	20	60	3
KHR-4180	1.8	8	20	60	3
KHR-4181	1.81	8	20	60	3
KHR-4182	1.82	8	20	60	3
KHR-4183	1.83	8	20	60	3
KHR-4184	1.84	8	20	60	3
KHR-4185	1.85	8	20	60	3
KHR-4186	1.86	8	20	60	3
KHR-4187	1.87	8	20	60	3
KHR-4188	1.88	8	20	60	3
KHR-4189	1.89	8	20	60	3
KHR-4190	1.9	8	20	60	3
KHR-4191	1.91	10	24	60	3
KHR-4192	1.92	10	24	60	3
KHR-4193	1.93	10	24	60	3
KHR-4194	1.94	10	24	60	3
KHR-4195	1.95	10	24	60	3
KHR-4196	1.96	10	24	60	3
KHR-4197	1.97	10	24	60	3
KHR-4198	1.98	10	24	60	3
KHR-4199	1.99	10	24	60	3
KHR-4200	2	10	24	60	3
KHR-4201	2.01	10	24	60	3
KHR-4202	2.02	10	24	60	3
KHR-4203	2.03	10	24	60	3
KHR-4204	2.04	10	24	60	3
KHR-4205	2.05	10	24	60	3

KHR-4

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4206	2.06	10	24	60	3
KHR-4207	2.07	10	24	60	3
KHR-4208	2.08	10	24	60	3
KHR-4209	2.09	10	24	60	3
KHR-4210	2.1	10	24	60	3
KHR-4211	2.11	10	24	60	3
KHR-4212	2.12	10	24	60	3
KHR-4213	2.13	10	24	60	3
KHR-4214	2.14	10	24	60	3
KHR-4215	2.15	10	24	60	3
KHR-4216	2.16	10	24	60	3
KHR-4217	2.17	10	24	60	3
KHR-4218	2.18	10	24	60	3
KHR-4219	2.19	10	24	60	3
KHR-4220	2.2	10	24	60	3
KHR-4221	2.21	10	24	60	3
KHR-4222	2.22	10	24	60	3
KHR-4223	2.23	10	24	60	3
KHR-4224	2.24	10	24	60	3
KHR-4225	2.25	10	24	60	3
KHR-4226	2.26	10	24	60	3
KHR-4227	2.27	10	24	60	3
KHR-4228	2.28	10	24	60	3
KHR-4229	2.29	10	24	60	3
KHR-4230	2.3	10	24	60	3
KHR-4231	2.31	10	24	60	3
KHR-4232	2.32	10	24	60	3
KHR-4233	2.33	10	24	60	3
KHR-4234	2.34	10	24	60	3
KHR-4235	2.35	10	24	60	3
KHR-4236	2.36	10	24	60	3
KHR-4237	2.37	10	24	60	3
KHR-4238	2.38	10	24	60	3
KHR-4239	2.39	10	24	60	3
KHR-4240	2.4	10	24	60	3
KHR-4241	2.41	10	24	60	3
KHR-4242	2.42	10	24	60	3
KHR-4243	2.43	10	24	60	3
KHR-4244	2.44	10	24	60	3
KHR-4245	2.45	10	24	60	3
KHR-4246	2.46	10	24	60	3
KHR-4247	2.47	10	24	60	3
KHR-4248	2.48	10	24	60	3
KHR-4249	2.49	10	24	60	3
KHR-4250	2.5	10	24	60	3
KHR-4251	2.51	10	24	60	3
KHR-4252	2.52	10	24	60	3
KHR-4253	2.53	10	24	60	3

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4254	2.54	10	24	60	3
KHR-4255	2.55	10	24	60	3
KHR-4256	2.56	10	24	60	3
KHR-4257	2.57	10	24	60	3
KHR-4258	2.58	10	24	60	3
KHR-4259	2.59	10	24	60	3
KHR-4260	2.6	10	24	60	3
KHR-4261	2.61	10	24	60	3
KHR-4262	2.62	10	24	60	3
KHR-4263	2.63	10	24	60	3
KHR-4264	2.64	10	24	60	3
KHR-4265	2.65	10	24	60	3
KHR-4266	2.66	10	24	60	3
KHR-4267	2.67	10	24	60	3
KHR-4268	2.68	10	24	60	3
KHR-4269	2.69	10	24	60	3
KHR-4270	2.7	10	24	60	3
KHR-4271	2.71	10	24	60	3
KHR-4272	2.72	10	24	60	3
KHR-4273	2.73	10	24	60	3
KHR-4274	2.74	10	24	60	3
KHR-4275	2.75	10	24	60	3
KHR-4276	2.76	10	24	60	3
KHR-4277	2.77	10	24	60	3
KHR-4278	2.78	10	24	60	3
KHR-4279	2.79	10	24	60	3
KHR-4280	2.8	10	24	60	3
KHR-4281	2.81	10	24	60	3
KHR-4282	2.82	10	24	60	3
KHR-4283	2.83	10	24	60	3
KHR-4284	2.84	10	24	60	3
KHR-4285	2.85	10	24	60	3
KHR-4286	2.86	10	24	60	3
KHR-4287	2.87	10	24	60	3
KHR-4288	2.88	10	24	60	3
KHR-4289	2.89	10	24	60	3
KHR-4290	2.9	10	24	60	3
KHR-4291	2.91	15	30	60	3
KHR-4292	2.92	15	30	60	3
KHR-4293	2.93	15	30	60	3
KHR-4294	2.94	15	30	60	3
KHR-4295	2.95	15	30	60	3
KHR-4296	2.96	15	30	60	3
KHR-4297	2.97	15	30	60	3
KHR-4298	2.98	15	30	60	3
KHR-4299	2.99	15	30	60	3
KHR-4300	3	15	30	60	3
KHR-4301	3.01	15	30	60	3

KHR-4

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4302	3.02	15	30	60	3
KHR-4303	3.03	15	30	60	3
KHR-4304	3.04	15	30	60	3
KHR-4305	3.05	15	30	60	3
KHR-4306	3.06	15	30	60	3
KHR-4307	3.07	15	30	60	3
KHR-4308	3.08	15	30	60	3
KHR-4309	3.09	15	30	60	3
KHR-4310	3.1	15	30	70	4
KHR-4311	3.11	15	30	70	4
KHR-4312	3.12	15	30	70	4
KHR-4313	3.13	15	30	70	4
KHR-4314	3.14	15	30	70	4
KHR-4315	3.15	15	30	70	4
KHR-4316	3.16	15	30	70	4
KHR-4317	3.17	15	30	70	4
KHR-4318	3.18	15	30	70	4
KHR-4319	3.19	15	30	70	4
KHR-4320	3.2	15	30	70	4
KHR-4321	3.21	15	30	70	4
KHR-4322	3.22	15	30	70	4
KHR-4323	3.23	15	30	70	4
KHR-4324	3.24	15	30	70	4
KHR-4325	3.25	15	30	70	4
KHR-4326	3.26	15	30	70	4
KHR-4327	3.27	15	30	70	4
KHR-4328	3.28	15	30	70	4
KHR-4329	3.29	15	30	70	4
KHR-4330	3.3	15	30	70	4
KHR-4331	3.31	15	30	70	4
KHR-4332	3.32	15	30	70	4
KHR-4333	3.33	15	30	70	4
KHR-4334	3.34	15	30	70	4
KHR-4335	3.35	15	30	70	4
KHR-4336	3.36	15	30	70	4
KHR-4337	3.37	15	30	70	4
KHR-4338	3.38	15	30	70	4
KHR-4339	3.39	15	30	70	4
KHR-4340	3.4	15	30	70	4
KHR-4341	3.41	15	30	70	4
KHR-4342	3.42	15	30	70	4
KHR-4343	3.43	15	30	70	4
KHR-4344	3.44	15	30	70	4
KHR-4345	3.45	15	30	70	4
KHR-4346	3.46	15	30	70	4
KHR-4347	3.47	15	30	70	4
KHR-4348	3.48	15	30	70	4
KHR-4349	3.49	15	30	70	4

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4350	3.5	15	30	70	4
KHR-4351	3.51	15	30	70	4
KHR-4352	3.52	15	30	70	4
KHR-4353	3.53	15	30	70	4
KHR-4354	3.54	15	30	70	4
KHR-4355	3.55	15	30	70	4
KHR-4356	3.56	15	30	70	4
KHR-4357	3.57	15	30	70	4
KHR-4358	3.58	15	30	70	4
KHR-4359	3.59	15	30	70	4
KHR-4360	3.6	15	30	70	4
KHR-4361	3.61	15	30	70	4
KHR-4362	3.62	15	30	70	4
KHR-4363	3.63	15	30	70	4
KHR-4364	3.64	15	30	70	4
KHR-4365	3.65	15	30	70	4
KHR-4366	3.66	15	30	70	4
KHR-4367	3.67	15	30	70	4
KHR-4368	3.68	15	30	70	4
KHR-4369	3.69	15	30	70	4
KHR-4370	3.7	15	30	70	4
KHR-4371	3.71	15	30	70	4
KHR-4372	3.72	15	30	70	4
KHR-4373	3.73	15	30	70	4
KHR-4374	3.74	15	30	70	4
KHR-4375	3.75	15	30	70	4
KHR-4376	3.76	15	30	70	4
KHR-4377	3.77	15	30	70	4
KHR-4378	3.78	15	30	70	4
KHR-4379	3.79	15	30	70	4
KHR-4380	3.8	15	30	70	4
KHR-4381	3.81	15	30	70	4
KHR-4382	3.82	15	30	70	4
KHR-4383	3.83	15	30	70	4
KHR-4384	3.84	15	30	70	4
KHR-4385	3.85	15	30	70	4
KHR-4386	3.86	15	30	70	4
KHR-4387	3.87	15	30	70	4
KHR-4388	3.88	15	30	70	4
KHR-4389	3.89	15	30	70	4
KHR-4390	3.9	15	30	70	4
KHR-4391	3.91	20	35	70	4
KHR-4392	3.92	20	35	70	4
KHR-4393	3.93	20	35	70	4
KHR-4394	3.94	20	35	70	4
KHR-4395	3.95	20	35	70	4
KHR-4396	3.96	20	35	70	4
KHR-4397	3.97	20	35	70	4

KHR-4

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4398	3.98	20	35	70	4
KHR-4399	3.99	20	35	70	4
KHR-4400	4	20	35	70	4
KHR-4401	4.01	20	35	70	4
KHR-4402	4.02	20	35	70	4
KHR-4403	4.03	20	35	70	4
KHR-4404	4.04	20	35	70	4
KHR-4405	4.05	20	35	70	4
KHR-4406	4.06	20	35	70	4
KHR-4407	4.07	20	35	70	4
KHR-4408	4.08	20	35	70	4
KHR-4409	4.09	20	35	70	4
KHR-4410	4.1	20	35	80	6
KHR-4411	4.11	20	35	80	6
KHR-4412	4.12	20	35	80	6
KHR-4413	4.13	20	35	80	6
KHR-4414	4.14	20	35	80	6
KHR-4415	4.15	20	35	80	6
KHR-4416	4.16	20	35	80	6
KHR-4417	4.17	20	35	80	6
KHR-4418	4.18	20	35	80	6
KHR-4419	4.19	20	35	80	6
KHR-4420	4.2	20	35	80	6
KHR-4421	4.21	20	35	80	6
KHR-4422	4.22	20	35	80	6
KHR-4423	4.23	20	35	80	6
KHR-4424	4.24	20	35	80	6
KHR-4425	4.25	20	35	80	6
KHR-4426	4.26	20	35	80	6
KHR-4427	4.27	20	35	80	6
KHR-4428	4.28	20	35	80	6
KHR-4429	4.29	20	35	80	6
KHR-4430	4.3	20	35	80	6
KHR-4431	4.31	20	35	80	6
KHR-4432	4.32	20	35	80	6
KHR-4433	4.33	20	35	80	6
KHR-4434	4.34	20	35	80	6
KHR-4435	4.35	20	35	80	6
KHR-4436	4.36	20	35	80	6
KHR-4437	4.37	20	35	80	6
KHR-4438	4.38	20	35	80	6
KHR-4439	4.39	20	35	80	6
KHR-4440	4.4	20	35	80	6
KHR-4441	4.41	20	35	80	6
KHR-4442	4.42	20	35	80	6
KHR-4443	4.43	20	35	80	6
KHR-4444	4.44	20	35	80	6
KHR-4445	4.45	20	35	80	6

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4446	4.46	20	35	80	6
KHR-4447	4.47	20	35	80	6
KHR-4448	4.48	20	35	80	6
KHR-4449	4.49	20	35	80	6
KHR-4450	4.5	20	35	80	6
KHR-4451	4.51	20	35	80	6
KHR-4452	4.52	20	35	80	6
KHR-4453	4.53	20	35	80	6
KHR-4454	4.54	20	35	80	6
KHR-4455	4.55	20	35	80	6
KHR-4456	4.56	20	35	80	6
KHR-4457	4.57	20	35	80	6
KHR-4458	4.58	20	35	80	6
KHR-4459	4.59	20	35	80	6
KHR-4460	4.6	20	35	80	6
KHR-4461	4.61	20	35	80	6
KHR-4462	4.62	20	35	80	6
KHR-4463	4.63	20	35	80	6
KHR-4464	4.64	20	35	80	6
KHR-4465	4.65	20	35	80	6
KHR-4466	4.66	20	35	80	6
KHR-4467	4.67	20	35	80	6
KHR-4468	4.68	20	35	80	6
KHR-4469	4.69	20	35	80	6
KHR-4470	4.7	20	35	80	6
KHR-4471	4.71	20	35	80	6
KHR-4472	4.72	20	35	80	6
KHR-4473	4.73	20	35	80	6
KHR-4474	4.74	20	35	80	6
KHR-4475	4.75	20	35	80	6
KHR-4476	4.76	20	35	80	6
KHR-4477	4.77	20	35	80	6
KHR-4478	4.78	20	35	80	6
KHR-4479	4.79	20	35	80	6
KHR-4480	4.8	20	35	80	6
KHR-4481	4.81	20	35	80	6
KHR-4482	4.82	20	35	80	6
KHR-4483	4.83	20	35	80	6
KHR-4484	4.84	20	35	80	6
KHR-4485	4.85	20	35	80	6
KHR-4486	4.86	20	35	80	6
KHR-4487	4.87	20	35	80	6
KHR-4488	4.88	20	35	80	6
KHR-4489	4.89	20	35	80	6
KHR-4490	4.9	20	35	80	6
KHR-4491	4.91	24	40	80	6
KHR-4492	4.92	24	40	80	6
KHR-4493	4.93	24	40	80	6

KHR-4

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4494	4.94	24	40	80	6
KHR-4495	4.95	24	40	80	6
KHR-4496	4.96	24	40	80	6
KHR-4497	4.97	24	40	80	6
KHR-4498	4.98	24	40	80	6
KHR-4499	4.99	24	40	80	6
KHR-4500	5	24	40	80	6
KHR-4501	5.01	24	40	80	6
KHR-4502	5.02	24	40	80	6
KHR-4503	5.03	24	40	80	6
KHR-4504	5.04	24	40	80	6
KHR-4505	5.05	24	40	80	6
KHR-4506	5.06	24	40	80	6
KHR-4507	5.07	24	40	80	6
KHR-4508	5.08	24	40	80	6
KHR-4509	5.09	24	40	80	6
KHR-4510	5.1	24	40	80	6
KHR-4511	5.11	24	40	80	6
KHR-4512	5.12	24	40	80	6
KHR-4513	5.13	24	40	80	6
KHR-4514	5.14	24	40	80	6
KHR-4515	5.15	24	40	80	6
KHR-4516	5.16	24	40	80	6
KHR-4517	5.17	24	40	80	6
KHR-4518	5.18	24	40	80	6
KHR-4519	5.19	24	40	80	6
KHR-4520	5.2	24	40	80	6
KHR-4521	5.21	24	40	80	6
KHR-4522	5.22	24	40	80	6
KHR-4523	5.23	24	40	80	6
KHR-4524	5.24	24	40	80	6
KHR-4525	5.25	24	40	80	6
KHR-4526	5.26	24	40	80	6
KHR-4527	5.27	24	40	80	6
KHR-4528	5.28	24	40	80	6
KHR-4529	5.29	24	40	80	6
KHR-4530	5.3	24	40	80	6
KHR-4531	5.31	24	40	80	6
KHR-4532	5.32	24	40	80	6
KHR-4533	5.33	24	40	80	6
KHR-4534	5.34	24	40	80	6
KHR-4535	5.35	24	40	80	6
KHR-4536	5.36	24	40	80	6
KHR-4537	5.37	24	40	80	6
KHR-4538	5.38	24	40	80	6
KHR-4539	5.39	24	40	80	6
KHR-4540	5.4	24	40	80	6
KHR-4541	5.41	24	40	80	6

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4542	5.42	24	40	80	6
KHR-4543	5.43	24	40	80	6
KHR-4544	5.44	24	40	80	6
KHR-4545	5.45	24	40	80	6
KHR-4546	5.46	24	40	80	6
KHR-4547	5.47	24	40	80	6
KHR-4548	5.48	24	40	80	6
KHR-4549	5.49	24	40	80	6
KHR-4550	5.5	24	40	80	6
KHR-4551	5.51	24	40	80	6
KHR-4552	5.52	24	40	80	6
KHR-4553	5.53	24	40	80	6
KHR-4554	5.54	24	40	80	6
KHR-4555	5.55	24	40	80	6
KHR-4556	5.56	24	40	80	6
KHR-4557	5.57	24	40	80	6
KHR-4558	5.58	24	40	80	6
KHR-4559	5.59	24	40	80	6
KHR-4560	5.6	24	40	80	6
KHR-4561	5.61	24	40	80	6
KHR-4562	5.62	24	40	80	6
KHR-4563	5.63	24	40	80	6
KHR-4564	5.64	24	40	80	6
KHR-4565	5.65	24	40	80	6
KHR-4566	5.66	24	40	80	6
KHR-4567	5.67	24	40	80	6
KHR-4568	5.68	24	40	80	6
KHR-4569	5.69	24	40	80	6
KHR-4570	5.7	24	40	80	6
KHR-4571	5.71	24	40	80	6
KHR-4572	5.72	24	40	80	6
KHR-4573	5.73	24	40	80	6
KHR-4574	5.74	24	40	80	6
KHR-4575	5.75	24	40	80	6
KHR-4576	5.76	24	40	80	6
KHR-4577	5.77	24	40	80	6
KHR-4578	5.78	24	40	80	6
KHR-4579	5.79	24	40	80	6
KHR-4580	5.8	24	40	80	6
KHR-4581	5.81	24	40	80	6
KHR-4582	5.82	24	40	80	6
KHR-4583	5.83	24	40	80	6
KHR-4584	5.84	24	40	80	6
KHR-4585	5.85	24	40	80	6
KHR-4586	5.86	24	40	80	6
KHR-4587	5.87	24	40	80	6
KHR-4588	5.88	24	40	80	6
KHR-4589	5.89	24	40	80	6

KHR-4

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4590	5.9	24	40	80	6
KHR-4591	5.91	24	40	80	6
KHR-4592	5.92	24	40	80	6
KHR-4593	5.93	24	40	80	6
KHR-4594	5.94	24	40	80	6
KHR-4595	5.95	24	40	80	6
KHR-4596	5.96	24	40	80	6
KHR-4597	5.97	24	40	80	6
KHR-4598	5.98	24	40	80	6
KHR-4599	5.99	24	40	80	6
KHR-4600	6	24	40	80	6
KHR-4601	6.01	24	40	80	6
KHR-4602	6.02	24	40	80	6
KHR-4603	6.03	24	40	80	6
KHR-4604	6.04	24	40	80	6
KHR-4605	6.05	24	40	80	6
KHR-4610	6.1	25	45	100	8
KHR-4615	6.15	25	45	100	8
KHR-4620	6.2	25	45	100	8
KHR-4625	6.25	25	45	100	8
KHR-4630	6.3	25	45	100	8
KHR-4635	6.35	25	45	100	8
KHR-4640	6.4	25	45	100	8
KHR-4645	6.45	25	45	100	8
KHR-4650	6.5	25	45	100	8
KHR-4655	6.55	25	45	100	8
KHR-4660	6.6	25	45	100	8
KHR-4665	6.65	25	45	100	8
KHR-4670	6.7	25	45	100	8
KHR-4675	6.75	25	45	100	8
KHR-4680	6.8	25	45	100	8
KHR-4685	6.85	25	45	100	8
KHR-4690	6.9	25	45	100	8
KHR-4695	6.95	25	45	100	8
KHR-4696	6.96	25	45	100	8
KHR-4697	6.97	25	45	100	8
KHR-4698	6.98	25	45	100	8
KHR-4699	6.99	25	45	100	8
KHR-4700	7	25	45	100	8
KHR-4701	7.01	25	45	100	8
KHR-4702	7.02	25	45	100	8
KHR-4703	7.03	25	45	100	8
KHR-4704	7.04	25	45	100	8
KHR-4705	7.05	25	45	100	8
KHR-4710	7.1	25	45	100	8
KHR-4715	7.15	25	45	100	8
KHR-4720	7.2	25	45	100	8
KHR-4725	7.25	25	45	100	8

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4730	7.3	25	45	100	8
KHR-4735	7.35	25	45	100	8
KHR-4740	7.4	25	45	100	8
KHR-4745	7.45	25	45	100	8
KHR-4750	7.5	25	45	100	8
KHR-4755	7.55	25	45	100	8
KHR-4760	7.6	25	45	100	8
KHR-4765	7.65	25	45	100	8
KHR-4770	7.7	25	45	100	8
KHR-4775	7.75	25	45	100	8
KHR-4780	7.8	25	45	100	8
KHR-4785	7.85	25	45	100	8
KHR-4790	7.9	25	45	100	8
KHR-4795	7.95	25	45	100	8
KHR-4796	7.96	25	45	100	8
KHR-4797	7.97	25	45	100	8
KHR-4798	7.98	25	45	100	8
KHR-4799	7.99	25	45	100	8
KHR-4800	8	25	45	100	8
KHR-4801	8.01	25	45	100	8
KHR-4802	8.02	25	45	100	8
KHR-4803	8.03	25	45	100	8
KHR-4804	8.04	25	45	100	8
KHR-4805	8.05	25	45	100	8
KHR-4810	8.1	25	50	100	10
KHR-4815	8.15	25	50	100	10
KHR-4820	8.2	25	50	100	10
KHR-4825	8.25	25	50	100	10
KHR-4830	8.3	25	50	100	10
KHR-4835	8.35	25	50	100	10
KHR-4840	8.4	25	50	100	10
KHR-4845	8.45	25	50	100	10
KHR-4850	8.5	25	50	100	10
KHR-4855	8.55	25	50	100	10
KHR-4860	8.6	25	50	100	10
KHR-4865	8.65	25	50	100	10
KHR-4870	8.7	25	50	100	10
KHR-4875	8.75	25	50	100	10
KHR-4880	8.8	25	50	100	10
KHR-4885	8.85	25	50	100	10
KHR-4890	8.9	25	50	100	10
KHR-4895	8.95	25	50	100	10
KHR-4896	8.96	25	50	100	10
KHR-4897	8.97	25	50	100	10
KHR-4898	8.98	25	50	100	10
KHR-4899	8.99	25	50	100	10
KHR-4900	9	25	50	100	10
KHR-4901	9.01	25	50	100	10

KHR-4

品番 Code No.	刃径 D Flute Diameter	刃長 ℓ Flute Length	有効長 ℓ1 Effective Length	全長 L Total Length	柄径 d Shank Diameter
KHR-4902	9.02	25	50	100	10
KHR-4903	9.03	25	50	100	10
KHR-4904	9.04	25	50	100	10
KHR-4905	9.05	25	50	100	10
KHR-4910	9.1	25	50	100	10
KHR-4915	9.15	25	50	100	10
KHR-4920	9.2	25	50	100	10
KHR-4925	9.25	25	50	100	10
KHR-4930	9.3	25	50	100	10
KHR-4935	9.35	25	50	100	10
KHR-4940	9.4	25	50	100	10
KHR-4945	9.45	25	50	100	10
KHR-4950	9.5	25	50	100	10
KHR-4955	9.55	25	50	100	10
KHR-4960	9.6	25	50	100	10
KHR-4965	9.65	25	50	100	10
KHR-4970	9.7	25	50	100	10
KHR-4975	9.75	25	50	100	10
KHR-4980	9.8	25	50	100	10
KHR-4985	9.85	25	50	100	10
KHR-4990	9.9	25	50	100	10
KHR-4995	9.95	25	50	100	10
KHR-4996	9.96	25	50	100	10
KHR-4997	9.97	25	50	100	10
KHR-4998	9.98	25	50	100	10
KHR-4999	9.99	25	50	100	10
KHR-41000	10	25	50	100	10
KHR-41001	10.01	25	50	100	10
KHR-41002	10.02	25	50	100	10
KHR-41003	10.03	25	50	100	10
KHR-41004	10.04	25	50	100	10
KHR-41005	10.05	25	50	100	10
KHR-41010	10.1	30	60	120	12
KHR-41015	10.15	30	60	120	12
KHR-41020	10.2	30	60	120	12
KHR-41025	10.25	30	60	120	12
KHR-41030	10.3	30	60	120	12
KHR-41035	10.35	30	60	120	12
KHR-41040	10.4	30	60	120	12
KHR-41045	10.45	30	60	120	12
KHR-41050	10.5	30	60	120	12
KHR-41055	10.55	30	60	120	12
KHR-41060	10.6	30	60	120	12
KHR-41065	10.65	30	60	120	12
KHR-41070	10.7	30	60	120	12
KHR-41075	10.75	30	60	120	12
KHR-41080	10.8	30	60	120	12
KHR-41085	10.85	30	60	120	12

[illegible]

KHR-4、KHRA-4、KLHR-OH

切削条件参考

Referential Cutting Conditions

被削材 Workpiece	切削速度 Cutting Speed m/min	送り速度 Feed mm/rev	リーマ代 Reamer Stock Removal mm	推奨切削油 Recommendable Cutting Oil
炭素工具鋼 Carbon Tool Steel	10～15	0.1 ～0.15	0.1	不水溶性 Non-Water Soluable
鋳鉄 Cast Iron	15～25	0.1 ～0.15	0.1 ～0.2	不水溶性 Non-Water Soluable
合金鋼 Alloy Steel	10～20	0.1 ～0.15	0.1	不水溶性 Non-Water Soluable
プリハードン鋼 Pre-Harden Steel	6～10	0.05以下	0.05～0.1	不水溶性 Non-Water Soluable
ステンレス Stainless Steel	10～15	0.05～0.1	0.05～0.1	不水溶性 Non-Water Soluable
銅・銅合金 Copper and Copper Alloy	25～30	0.05～0.1	0.1	不水溶性 Non-Water Soluable
チタン合金 Titanium Alloy	5～10	0.05以下	0.05～0.1	水溶性 Water Soluable
アルミ合金 Aluminum Alloy	20～40	0.05	0.1 ～0.2	不水溶性 Non-Water Soluable
樹脂 Resin	15～20	0.1 ～0.15	0.1 ～0.2	不水溶性 Non-Water Soluable
備考 Remarks	・使用する機械により切削速度、送り、仕上代を調整して下さい。 ・ Adjust Cutting Speed, Feed and Finishing Stock Removal according to Using Machine			

KHR-DLC

切削条件参考

Referential Cutting Conditions

被削材 Workpiece	切削速度 Cutting Speed m/min	送り速度 Feed mm/rev	リーマ代 Reamer Stock Removal mm	推奨切削油 Recommendable Cutting Oil
銅・銅合金 Copper and Copper Alloy	32～39	0.07～0.13	0.1	不水溶性 Non-Water Soluable
アルミ合金 Aluminum Alloy	26～52	0.07	0.1～0.2	不水溶性 Non-Water Soluable
樹脂 Resin	19～26	0.13～0.2	0.1～0.2	不水溶性 Non-Water Soluable
備考 Remarks	・使用する機械により切削速度、送り、仕上代を調整して下さい。 ・ Adjust Cutting Speed, Feed and Finishing Stock Removal according to Using Machine			