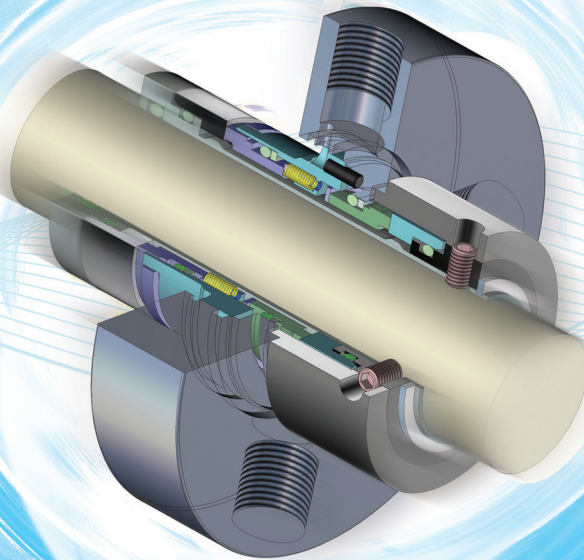


<http://www.plusmanager.co.kr>

메카니칼씰 자체 연구개발, 제조 전문 기업

World Best Sealing Solution Provider



(주)플러스매니저
PLUS Manager CO.,LTD.

회사개요

(주)플러스매니저 임직원은 최고의 **전문성**과 **헌신**하는 자세를 가지고 각종 PUMP에서 발생하는 누수 문제에 대하여 근본적이고 **신뢰**할 수 있는 Solution을 제공함으로써 설비의 가동률을 높여 고객님들의 생산성 향상, 원가 절감, 품질 향상 및 안전/환경 개선에 기여하겠습니다.

VISION STATEMENT

World Best Sealing Solution Provider

CORE VALUE

- 전문성 Professional
- 헌 신 Commitment
- 신 뢰 Confidence

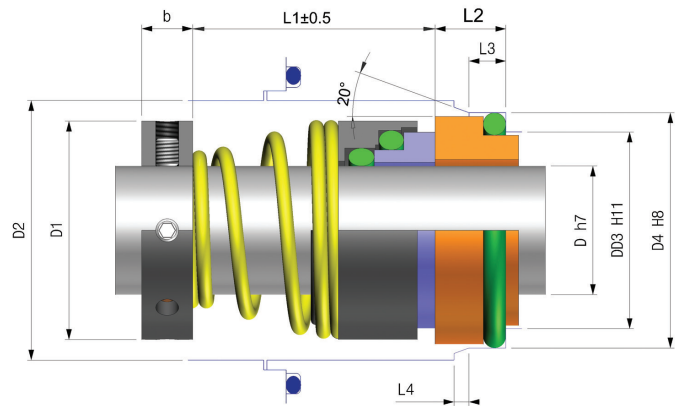
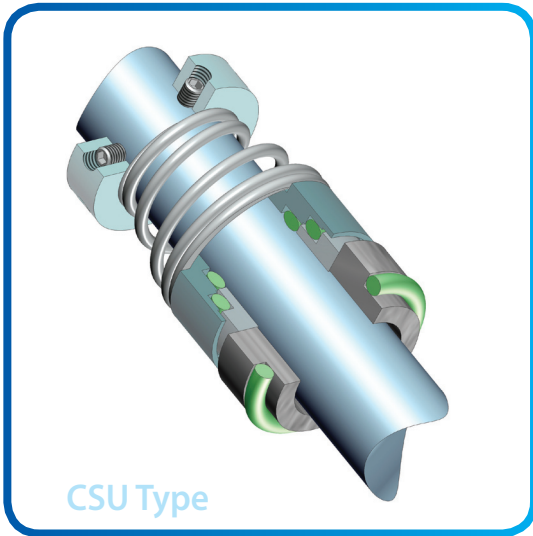
CUSTOMER DELIGHT

- 생산성 향상 Productivity maximize
- 원가절감 Lower cost
- 품질향상 Upper quality
- 안전/환경개선 Safety & environment

회사연혁

- 2000's (주)PLUS Manager 설립
- 2003's 한국해양대학교 창업보육센터 졸업
사업장 이전 (부산광역시 강서구 송정동 1587-1번지)
선박용 R/B Mechanical Seal 개발 및 적용 : SR, SU, MSU
고온용 C/T Mechanical Seal 개발 및 적용 : HC
주식회사 신신기계 납품업체 등록
- 2004's 선박용 연료펌프(기어펌프)용 Mechanical Seal 개발 및 적용
- 2006's Mechanical Seal용 Cooler 개발 및 적용 : PCL420N
컴팩트 C/T(카트리지) Mechanical Seal 개발 및 적용 : CS160
현대중공업주식회사 납품업체 등록
- 2007's 수중펌프용 R/B Mechanical Seal 개발 및 적용 : S200R
신우중공업주식회사 납품업체 등록
- 2008's 수중펌프용 Mechanical Seal 개발 및 적용 : S200M, S200N
수중펌프용 Double Cartridge Seal 개발 및 적용 : CSR220-135
수중펌프용 Mechanical Seal 개발 및 적용 : S200N-180
효성굿스프링스 납품업체 등록
월로펌프주식회사 납품업체 등록
- 2009's Double Cartridge Seal 개발 및 적용 : CS280
고온/고압용 Single Rubber Bellows Seal 개발 : SRH
고온/고압용 Multi-spring Enersize Rubber Bellows Seal 개발 : MRH
- 2010's 수중펌프용 Multi-spring Double Cartridge Seal 개발 및 적용 : CMR220-135
주식회사 청우하이드로 납품업체 등록
금정공업주식회사 납품업체 등록
- 2011's (주)플러스매니저 부설 연구소 설립





● 성능 / Performance

Max Pressure 12kg/cm²
 Max Temperature -20 ~ 200°C
 Max Speed 10m/s
 Max Viscosity 100,000cp
 Slurry 7wt%

● 용도 / Application

· Water Pump
 · Chemical Pump
 · Hot Fuel Oil
 · Sewage Pump

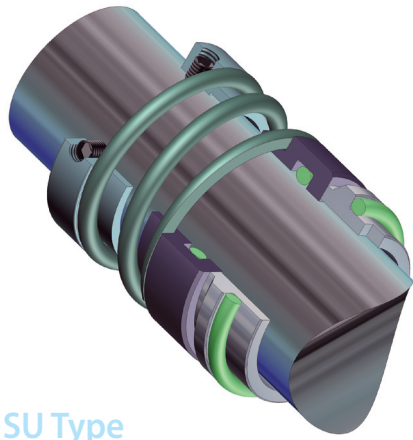
● 재질 / Material

Seal Face Sic to Carbon
 Sic to Sic
 O-Ring VITON, NBR etc
 Metal SUS304, SUS316

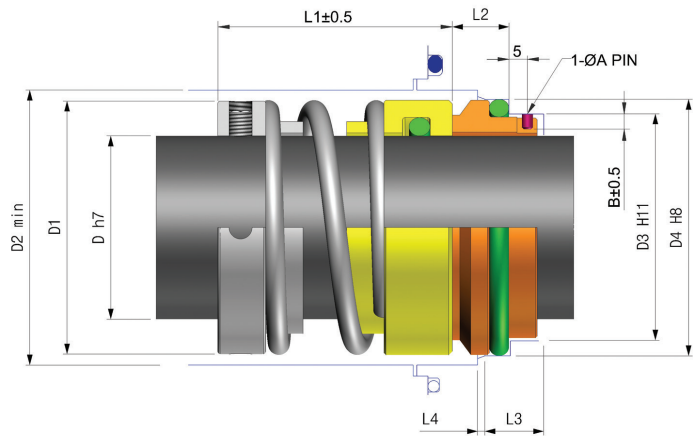
● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	L1	L2	L3	L4	b
011	11	25	27	20(19)	26(25)	20	11.5	8.5	2.0	10
015	15	29	31	25(24)	31(30)	24	11.0	8	2.0	10
018	18	32	34	28(27)	34(33)	24	11.0	8	2.0	10
020	20	34	36	30(29)	36(35)	26	11.0	8	2.0	10
025	25	39	41	35(34)	41(40)	28	12.0	8	2.0	10
028	28	42	44	38(37)	44(43)	28	12.0	9	2.0	10
030	30	44	46	40(39)	46(45)	28	13.0	9	2.0	10
032	32	46	48	42(42)	48(48)	30	13.0	9	2.0	10
035	35	49	51	45(44)	51(50)	30	13.0	10	2.0	10
040	40	56	60	50(51)	56(58)	36	14.0	11	2.0	12
045	45	61	65	55(56)	61(63)	37	14.0	11	2.0	12
050	50	66	70	60(62)	66(70)	45	15.0	12	2.5	12
055	55	71	75	65(67)	71(75)	45	15.0	12	2.5	12
060	60	76	85	72(72)	78(80)	52	16.0	13	2.5	12
065	65	83	90	77(77)	83(85)	52	16.0	13	2.5	12
070	70	90	95	81(83)	90(92)	52	18.0	15	2.5	13
075	75	95	104	86(88)	95(97)	57	18.0	15	2.5	13
080	80	100	109	91(95)	100(105)	57	17.0	15	3.0	13
085	85	105	114	96(100)	105(110)	57	18.0	15	3.0	13
090	90	110	119	101(105)	110(115)	60	18.0	15	3.0	13
095	95	115	124	106(110)	115(120)	60	18.0	15	3.0	13
100	100	120	129	116(115)	125(125)	60	20.0	17	3.0	14

* Note : () DIN Standard



SU Type



● 성능 / Performance

Max Pressure	10kg/cm ²
Max Temperature	-40 ~ 200°C
Max Speed	20m/s
Max Viscosity	100,000cp
Slurry	0.5wt%

● 용도 / Application

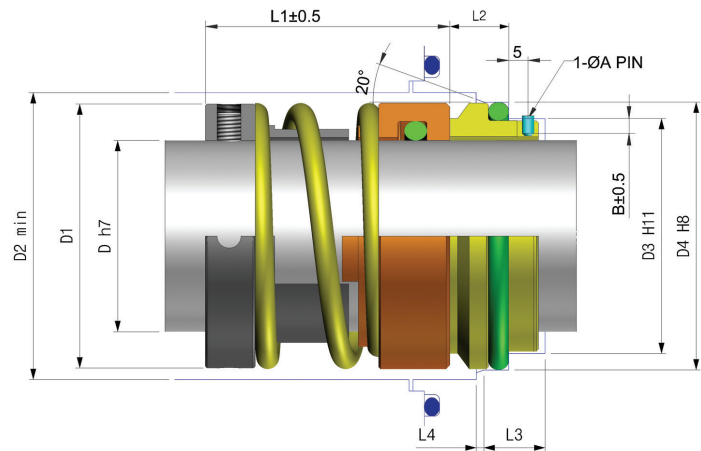
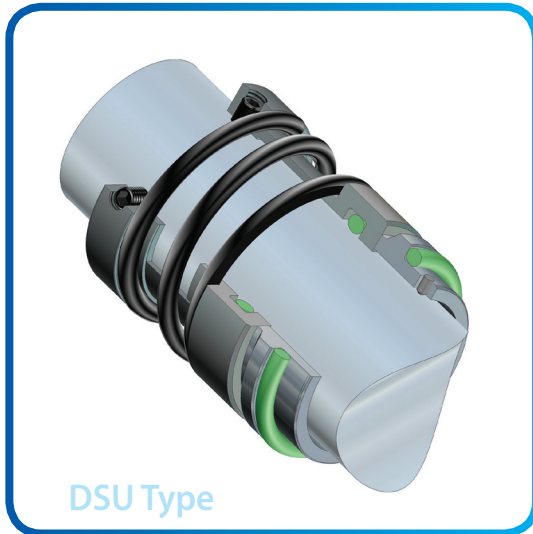
- High Viscosity Fluid, Oil
- Clean Water, Sea Water
- Crystallized Acid
- Alkali, Salt

● 재질 / Material

Seal Face	Sic to Carbon
	Sic to Sic
O-Ring	VITON, NBR etc
Metal	SUS304, SUS316

● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	L1	L2	L3	L4
010	10	18	22	17	21	31.5	8.5	5.5	2.0
012	12	20	24	19	23	31.5	8.5	5.5	2.0
014	14	23	26	21	25	31.5	8.5	5.5	2.0
016	16	25	28	23	27	31.5	8.5	5.5	2.0
018	18	30	34	27	33	35.5	9.5	7	2.0
020	20	32	36	29	35	35.5	9.5	7	2.0
022	22	34	38	31	37	35.5	9.5	7	2.0
024	24	36	40	33	39	40.5	9.5	7	2.0
025	25	38	41	34	40	40.5	9.5	7	2.0
028	28	42	44	37	43	40.5	9.5	7	2.0
030	30	44	46	39	45	40.5	9.5	7	2.0
035	35	48	51	44	50	45.5	9.5	7	2.0
038	38	52	58	49	56	45	10	8	2.0
040	40	54	60	51	58	45	10	8	2.0
045	45	60	65	56	63	46.5	13.5	8	2.0
050	50	65	70	62	70	46	14	8.5	2.5
055	55	71	75	67	75	56	14	8.5	2.5
060	60	78	85	72	80	56	14	8.5	2.5
063	63	81	88	75	83	56	14	8.5	2.5
065	65	83	90	77	85	66	14	8.5	2.5
070	70	89	95	83	92	62.5	17.5	9.5	2.5
075	75	95	104	88	97	62.5	17.5	9.5	2.5
080	80	100	109	95	105	72.5	17.5	10	3.0
085	85	107	114	100	110	72.5	17.5	10	3.0
090	90	112	119	105	115	72.5	17.5	10	3.0
095	95	119	124	110	120	72.5	17.5	10	3.0
100	100	124	129	115	125	72.5	17.5	10	3.0



● 성능 / Performance

Max Pressure 12kg/cm²
 Max Temperature -20 ~ 200℃
 Max Speed 20m/s
 Max Viscosity 150,000cp
 Slurry 7wt%

● 용도 / Application

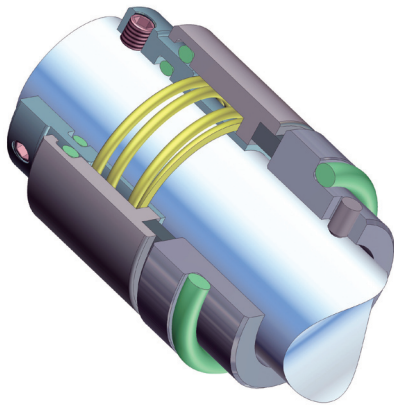
· High Viscosity Fluid, Oil
 · Clean Water, Sea Water
 · Crystallized Acid
 · Alkali, Salt

● 재질 / Material

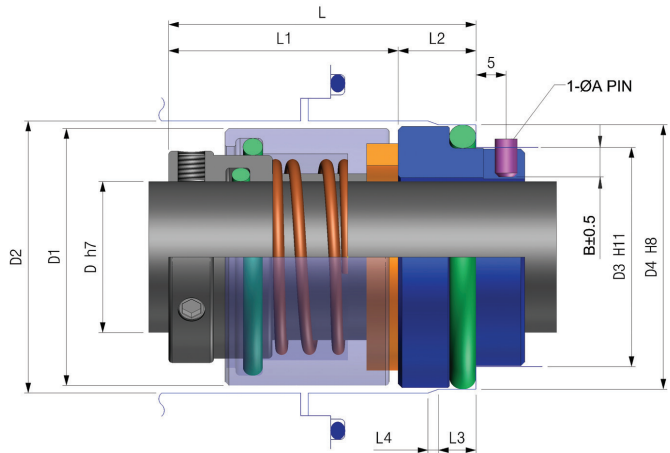
Seal Face Sic to Carbon
 Sic to Sic
 O-Ring VITON, NBR etc
 Metal SUS304, SUS316

● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	L1	L2	L3	L4	A	B
020	20	18	34	29	42	41	23	18	2.0	3	3.5
022	22	20	36	31	44	41	23	18	2.0	3	3.5
025	25	23	39	34	47	43	23	18	2.0	3	3.5
028	28	25	42	37	50	45	23	18	2.0	3	3.5
030	30	30	44	39	52	45	23	18	2.0	3	3.5
032	32	32	46	42	54	45	23	18	2.0	3	3.5
035	35	34	49	44	57	49	23	18	2.0	3	3.5
038	38	36	54	49	64	53	25	20	2.0	4	4.0
040	40	38	56	51	66	55	9.5	20	2.0	4	4.0
043	43	44	59	54	69	55	25	20	2.0	4	4.0
045	45	48	61	56	71	55	25	20	2.0	4	4.5
048	48	52	64	59	74	55	25	20	2.0	4	4.5
050	50	54	66	62	76	60	25	20	2.5	4	4.5
052	52	60	68	-	78	61	25	20	2.5	4	4.5
055	55	65	71	67	81	61	25	20	2.5	4	5.0
058	58	71	76	70	89	63	28	22	2.5	4	5.0
060	60	78	78	72	91	63	28	22	2.5	4	5.0
065	65	89	84	77	96	67	28	22	2.5	4	5.0
068	68	95	87	81	99	67	30	24	2.5	4	5.0
070	70	100	90	83	101	68	30	24	2.5	4	5.0
075	75	95	104	88	110	72	30	24	2.5	4	5.0
080	80	100	109	95	115	72	31	25	3.0	4	6.0
085	85	107	114	100	120	77	31	25	3.0	4	6.0
090	90	112	119	105	125	77	31	25	3.0	4	6.0
095	95	119	124	110	130	82	31	25	3.0	4	6.0
100	100	124	129	115	135	82	31	25	3.0	4	6.0



ISB Type



● 성능 / Performance

Max Pressure	25kg/cm ²
Max Temperature	-30 ~ 200°C
Max Speed	20m/s
Max Viscosity	300,000cp
Slurry	7wt%

● 용도 / Application

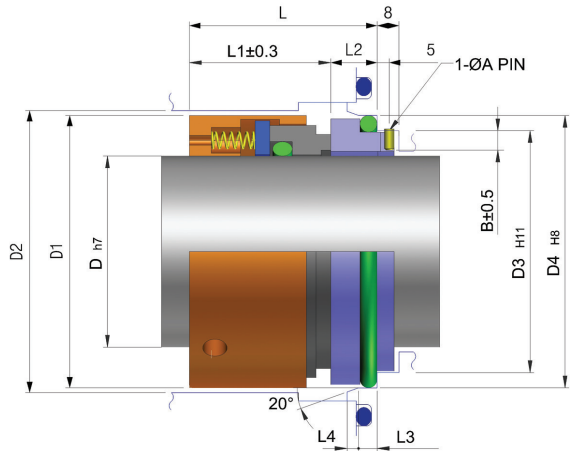
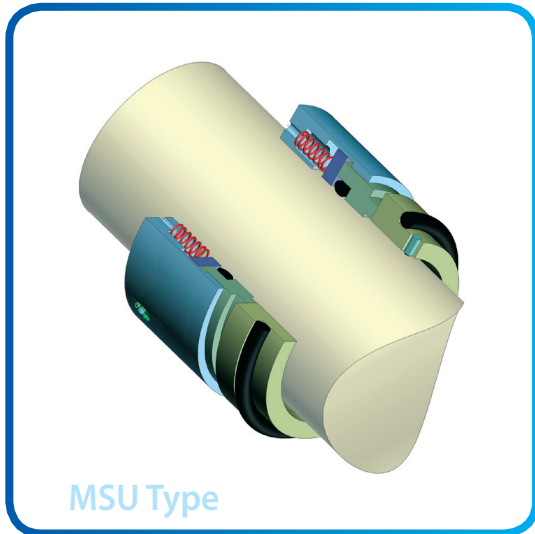
- Crystallized Acid
- Alkali, Salt
- High Slurry Water
- High Viscosity Oil

● 재질 / Material

Seal Face	Carbon to Sic
	Sic to Sic
O-Ring	VITON, NBR etc
Metal	SUS304, SUS316

● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	L1	L2	L3	L4	A	B
014	14	28	30	21	25	28.5	6.5	5	2.0	-	-
020	20	34	36	29	35	28.5	9.0	5	2.0	-	-
022	22	36	38	31	37	28.5	9.0	5	2.0	-	-
024	24	38	40	33	39	30.5	9.5	5	2.0	-	-
025	25	39	41	34	40	30.5	9.5	5	2.0	-	-
028	28	42	44	37	43	32.0	10.5	5	2.0	-	-
030	30	44	46	39	45	32.0	10.5	5	2.0	3	3.5
032	32	46	48	42	48	32.0	10.5	5	2.0	3	3.5
033	33	47	49	42	48	32.0	10.5	5	2.0	3	3.5
035	35	49	51	44	50	32.0	10.5	5	2.0	3	3.5
038	38	54	58	49	56	33.5	11.5	6	2.0	4	4.0
040	40	56	60	51	58	33.5	11.5	6	2.0	4	4.0
043	43	59	63	54	61	33.5	11.5	6	2.0	4	4.0
045	45	61	65	56	63	33.5	11.5	6	2.0	4	4.5
048	48	64	68	59	66	33.5	11.5	6	2.0	4	4.5
050	50	66	70	62	70	34.5	13.0	6	2.5	4	4.5
053	53	69	73	65	73	34.5	13.0	6	2.5	4	5.0
055	55	71	75	67	75	34.5	13.0	6	2.5	4	5.0
058	58	78	83	70	78	39.0	13.5	6	2.5	4	5.0
060	60	80	85	72	80	39.0	13.5	6	2.5	4	5.0
063	63	83	88	75	83	39.0	13.5	6	2.5	4	5.0
065	65	85	90	77	85	39.0	13.5	6	2.5	4	5.0
068	68	88	93	81	90	39.0	13.5	7	2.5	4	5.0
070	70	90	95	83	92	45.0	15.0	7	2.5	4	5.0
075	75	99	104	88	97	45.0	15.0	7	2.5	4	5.0
080	80	104	109	95	105	45.0	15.0	7	3.0	4	6.0
085	85	109	114	100	110	44.0	16.0	7	3.0	4	6.0
090	90	114	119	105	115	49.0	16.0	7	3.0	4	6.0
095	95	119	124	110	120	49.0	16.0	7	3.0	4	6.0
100	100	124	129	115	125	49.0	16.0	7	3.0	4	6.0



● 성능 / Performance

Max Pressure 12kg/cm²
 Max Temperature -20 ~ 200°C
 Max Speed 20m/s
 Max Viscosity 500cp
 Slurry 0.5wt%

● 용도 / Application

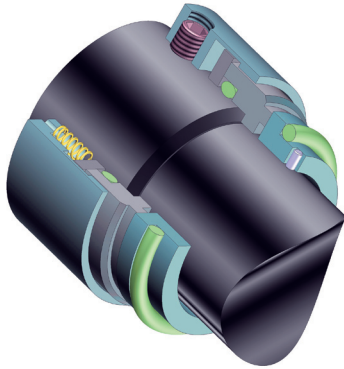
- Non Crystallized Acid
- Alkali, Salt
- Low Slurry Water
- Low Viscosity Oil

● 재질 / Material

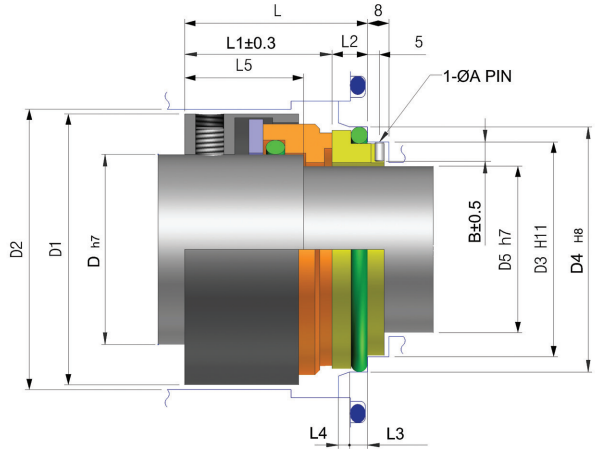
Seal Face Carbon to Sic
 Sic to Sic
 O-Ring VITON, NBR etc
 Metal SUS304, SUS316

● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	L1	L2	L3	L4	A
020	20	34	36	29	35	38.0	10.0	5.5	2.0	3
024	24	38	40	33	39	38.0	10.0	5.5	2.0	3
025	25	39	41	34	40	38.0	10.0	5.5	2.0	3
028	28	42	44	37	43	38.0	10.0	5.5	2.0	3
030	30	44	46	39	45	38.0	10.0	5.5	2.0	3
032	32	46	48	42	48	38.0	10.0	5.5	2.0	3
033	33	47	49	42	48	38.0	10.0	5.5	2.0	3
035	35	49	51	44	50	38.0	10.0	5.5	2.0	3
038	38	55	58	49	56	42.0	11.0	6	2.0	4
040	40	57	60	51	58	42.0	11.0	6	2.0	4
042	42	59	62	54	61	42.0	11.0	6	2.0	4
043	43	60	63	54	61	42.0	11.0	6	2.0	4
045	45	62	65	56	63	42.0	11.0	6	2.0	4
048	48	65	68	59	66	42.0	11.0	6	2.5	4
050	50	67	70	62	70	44.0	13.0	6	2.5	4
053	53	70	73	65	73	44.0	13.0	6	2.5	4
055	55	72	75	67	75	44.0	13.0	6	2.5	4
060	60	77	85	72	80	44.0	13.0	6	2.5	4
063	63	80	88	75	83	44.0	13.0	6	2.5	4
065	65	82	90	77	85	44.0	13.0	6	2.5	4
070	70	87	95	83	92	46.0	15.0	7	2.5	4
075	75	92	104	88	97	46.0	15.0	7	2.5	4
080	80	97	109	95	105	46.5	15.0	7	2.5	4
085	85	102	114	100	110	46.5	15.0	7	2.5	4
090	90	107	119	105	115	46.5	15.0	7	2.5	4
095	95	112	124	110	120	46.5	15.0	7	2.5	4
100	100	117	129	115	125	46.5	15.0	7	2.5	4



MSB Type



● 성능 / Performance

Max Pressure	35kg/cm ²
Max Temperature	-20 ~ 200°C
Max Speed	20m/s
Max Viscosity	500cp
Slurry	0.5wt%

● 용도 / Application

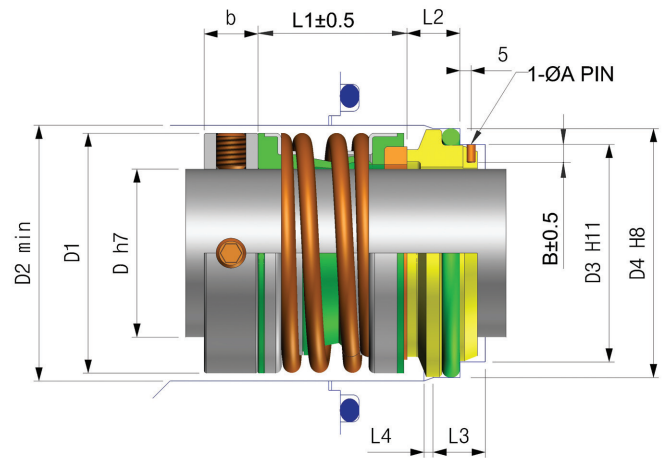
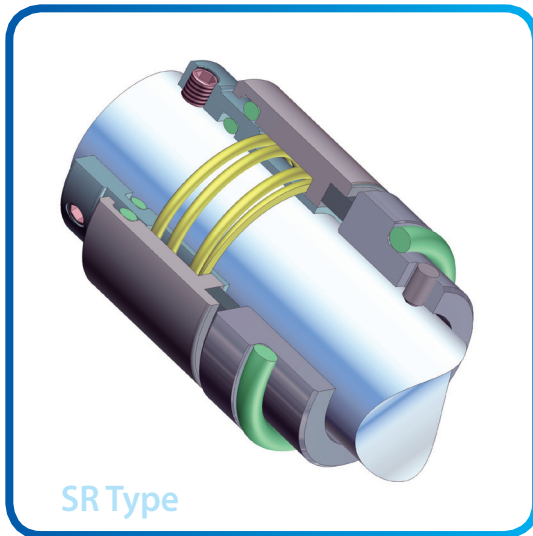
- Non Crystallized Acid
- Alkali, Salt
- Low Slurry Water
- Low Viscosity Oil

● 재질 / Material

Seal Face	Carbon to Sic
	Sic to Sic
O-Ring	VITON, NBR etc
Metal	SUS304, SUS316

● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	D5	L	L1	L2	L3	L4	L5	A	B
025	25	39	41	29	35	20	44	34	10	5.5	2.0	24	3	3.5
028	28	42	44	33	39	24	44	34	10	5.5	2.0	24	3	3.5
030	30	44	46	34	40	25	44	34	10	5.5	2.0	24	3	3.5
032	32	46	47	37	43	27	44	34	10	5.5	2.0	24	3	3.5
033	33	47	49	37	43	28	44	34	10	5.5	2.0	24	3	3.5
035	35	49	51	39	45	30	44	34	10	5.5	2.0	24	3	3.5
038	38	55	58	42	48	33	45	35	10	5	2.0	25	3	3.5
040	40	57	60	44	50	35	45	35	10	5	2.0	25	3	3.5
042	42	59	62	49	56	37	48	37	11	5	2.0	25	4	4.0
043	43	60	63	49	56	38	48	37	11	5	2.0	25	4	4.0
045	45	62	65	51	58	40	48	37	11	5	2.0	25	4	4.5
048	48	65	68	54	61	43	48	37	11	5	2.0	25	4	4.5
050	50	67	70	56	63	45	48	37	11	6	2.0	25	4	4.5
053	53	70	73	59	66	48	48	37	1	6	2.0	25	4	4.5
055	55	72	75	62	70	50	50	37	13	6	2.5	25	4	4.5
060	60	77	85	67	75	55	50	37	13	6	2.5	25	4	5.0
063	63	80	88	70	78	58	50	37	13	6	2.5	25	4	5.0
065	55	82	90	72	80	60	50	37	13	6	2.5	25	4	5.0
070	70	87	95	77	85	65	50	37	13	6	2.5	25	4	5.0
075	75	92	104	83	92	70	53	38	15	7	2.5	25	4	5.0
080	80	97	109	88	97	75	53	38	15	7	2.5	25	4	5.0
085	85	102	114	95	105	80	53	37.5	15.5	7	3.0	25	4	6.0
090	90	107	119	100	110	85	53	37.5	15.5	7	3.0	25	4	6.0
095	95	112	124	105	115	90	53	37.5	15.5	7	3.0	25	4	6.0
100	100	117	129	110	120	95	53	37.5	15.5	7	3.0	25	4	6.0



● 성능 / Performance

Max Pressure	20kg/cm ²
Max Temperature	-20 ~ 150°C
Max Speed	10m/s
Max Viscosity	200,000cp
Slurry	7wt%

● 용도 / Application

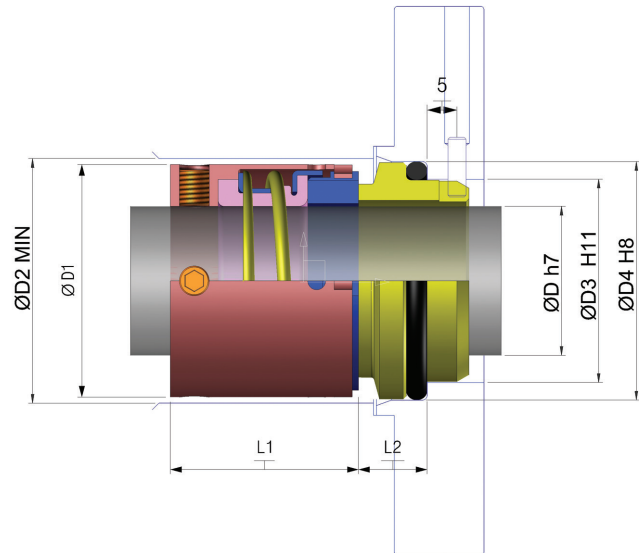
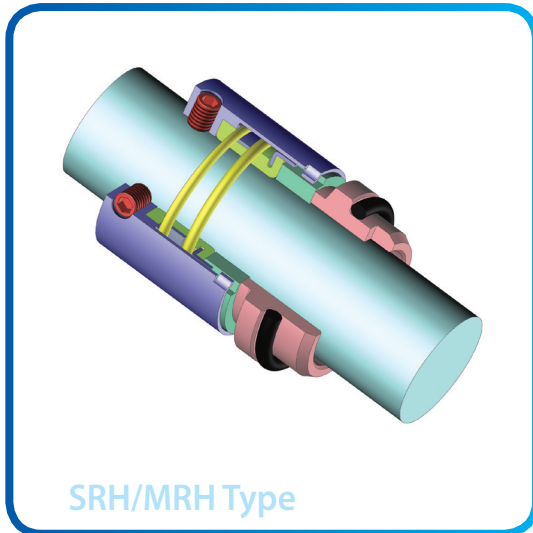
- Water, Sea Water, Oil
- Media Containing Fluid
- Waste Water
- Sewage Application
- High Viscosity Polymer
- Pulp, Paint

● 재질 / Material

Seal Face	Sic to Carbon
	Sic to Sic
O-Ring, RB	VITON, NBR etc
Metal	SUS304, SUS316

● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	L1	L2	b	L3	L4	A	B
012	12	22	24	19	23	26.5	10.0	10.0	4	1.2	-	-
015	15	25	27	23	27	29.0	10.0	10.0	4	1.5	-	-
020	20	34	36	29	35	31.5	10.0	10.0	5	1.5	-	-
025	25	39	41	34	40	34.0	10.0	10.0	5	1.5	-	-
030	30	44	46	39	45	32.5	10.0	10.0	5	1.5	-	-
035	35	49	51	44	50	32.5	10.0	10.0	5	1.5	-	-
040	40	56	60	51	58	34.5	10.5	10.0	6	1.5	-	-
045	45	61	65	56	63	33.2	11.8	12.0	6	2.5	-	-
050	50	66	70	62	70	32.8	14.7	12.0	6	2.5	-	-
055	55	72	75	67	75	36.0	11.5	12.0	6	2.5	-	-
060	60	78	85	72	80	37.5	15.0	12.0	6	2.5	4	5
065	65	83	90	77(75.2)	85(81.2)	39.0	16.5	13(20.5)	6	2.5	4	5
070	70	88	85	83(79.9)	92(85.9)	46.5	16.5	13.0	7	2.5	4	5
075	75	95	104	88	97	46.0	18.0	13.0	7	2.5	4	5
080	80	99.5	109	95	105	46.0	18.2	13.0	7	2.5	4	6
085	85	109	114	100	110	47.5	18.2	13.0	7	2.5	4	6
090	90	114	119	105(103.8)	115(109.8)	52.5	18.2	14(21.3)	7	2.5	4	6
095	95	119	124	110	120	52.5	17.2	14.0	7	2.5	4	6
100	100	124	129	115	125	52.5	17.2	14.0	7	2.5	4	6



● 성능 / Performance

Max Pressure	30kg/cm ²
Max Temperature	-30 ~ 200°C
Max Speed	20m/s
Slurry	7wt%

● 용도 / Application

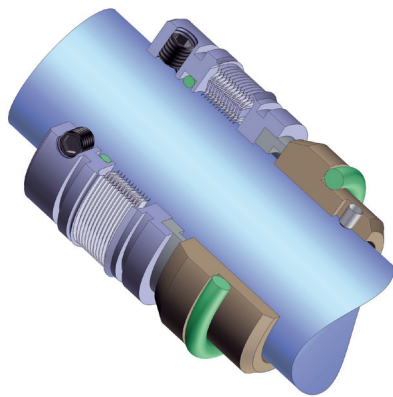
- Water, Sea Water, Oil
- Media Containing Fluid
- Waste Water
- Sewage Application
- High Viscosity Polymer
- Pulp, Paint

● Design Feature

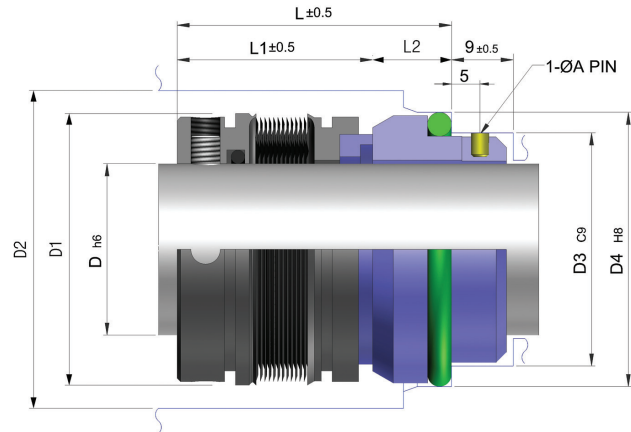
- Single Spring / Multi-Spring Applicable
- Automatic alignment in abnormal shaft movement (run-out, seal face wear, equipment vibration)
- Mechanical Direct Drive : Eliminate overstress of the rubber bellows and reduce seal face slanting
- Non-clog of coil spring : Not affected by build up of solid.
- Special balance : Allow higher pressure and temperature
- 대형 size(축경 200mm 이상도 가능) 양흡입펌프에 최적화된 Seal이며 이물질이 다량 함유된 곳에 메탈벨로우즈 씰 보다 우수한 성능 발휘함
- Cartridge Seal로 제작 가능

● 치수표 / Dimension

※ 해당 제품의 치수표는 당사에 문의해 주시기 바랍니다.



CMB Type



● 성능 / Performance

Max Pressure	23kg/cm ²
Max Temperature	-30 ~ 230℃
Max Speed	20m/s
Max Viscosity	1,000cp
Slurry	0.5wt%

● 용도 / Application

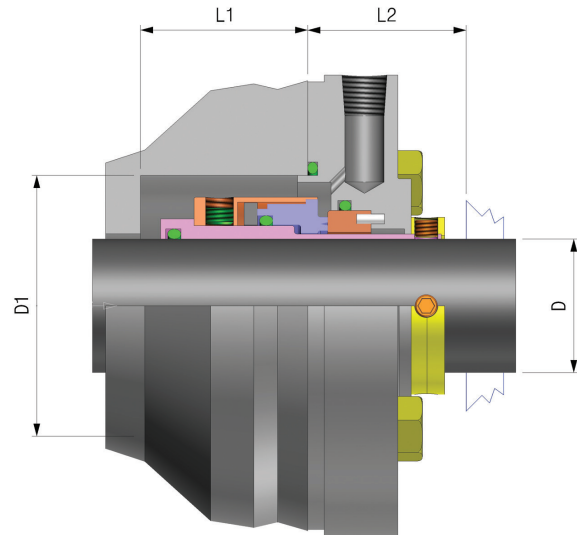
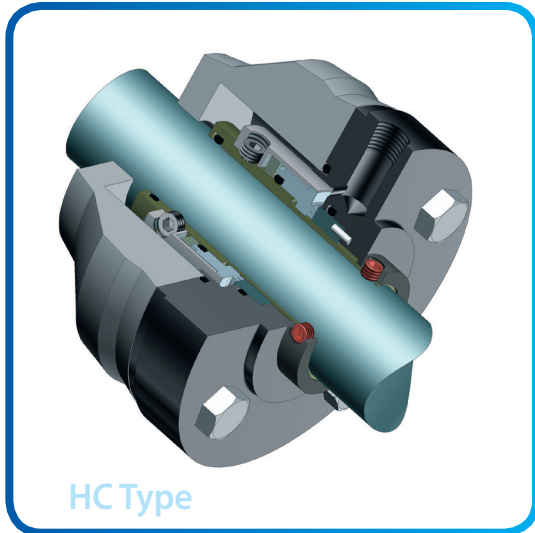
Non Crystallized Acid
Media Containing Fluid
Alkali, Salt
Hot Oil, Pulp Solution
Low Viscosity Oil
Hydrocarbon

● 재질 / Material

Seal Face	Carbon to Sic
	Sic to Sic
O-Ring	VITON, NBR etc
Metal	SUS304, SUS316

● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	L	L1	L2	L3	L4	A
018	18	32.0	34	27	33	37.5	27.5	10.0	2.0	5	3
020	20	33.5	36	29	35	37.5	27.5	10.0	2.0	5	3
022	22	36.5	38	31	37	37.5	27.5	10.0	2.0	5	3
024	24	39.0	40	33	39	40.0	30.0	10.0	2.0	5	3
025	25	39.6	41	34	40	40.0	30.0	10.0	2.0	5	3
028	28	42.8	44	37	43	42.5	32.5	10.0	2.0	5	3
030	30	45.0	46	39	45	42.5	32.5	10.0	2.0	5	3
032	32	46.0	48	42	48	42.5	32.5	10.0	2.0	5	3
033	33	48.0	49	42	48	42.5	32.5	10.0	2.0	5	3
035	35	49.2	51	44	50	42.5	32.5	10.0	2.0	5	3
038	38	52.3	58	49	56	45.0	34.0	11.0	2.0	6	4
040	40	55.5	60	51	58	45.0	34.0	11.0	2.0	6	4
043	43	57.5	63	54	61	45.0	34.0	11.0	2.0	6	4
045	45	58.7	65	56	63	45.0	34.0	11.0	2.0	6	4
048	48	61.9	68	59	66	45.0	34.0	11.0	2.0	6	4
050	50	65.0	70	62	70	47.5	34.5	13.0	2.5	6	4
053	53	68.2	73	65	73	47.5	34.5	13.0	2.5	6	4
055	55	70.0	75	67	75	47.5	34.5	13.0	2.5	6	4
058	58	71.7	83	70	78	52.5	39.5	13.0	2.5	6	4
060	60	74.6	85	72	80	52.5	39.5	13.0	2.5	6	4
063	63	79.0	88	75	83	52.5	39.5	13.0	2.5	6	4
065	65	84.1	90	77	85	52.5	39.5	13.0	2.5	6	4
068	68	87.3	93	81	90	52.5	39.5	15.3	2.5	7	4
070	70	87.3	95	83	92	60.0	44.7	15.3	2.5	7	4
075	75	95.0	104	88	97	60.0	44.7	15.3	2.5	7	4
080	80	98.4	109	95	105	60.0	44.3	15.7	3.0	7	4
085	85	104.7	114	100	110	60.0	44.3	15.7	3.0	7	4
090	90	111.0	119	105	115	65.0	49.3	15.7	3.0	7	4
095	95	114.0	124	110	120	65.0	49.3	15.7	3.0	7	4
100	100	117.4	129	115	125	65.0	49.3	15.7	3.0	7	4



● 성능 / Performance

Max Pressure	20kg/cm ²
Max Temperature	-40 ~ 200°C (No cooling below 170°C)
Max Speed	25m/s
API PLAN 11 (API PLAN 21 Over 170°C)	

● 용도 / Application

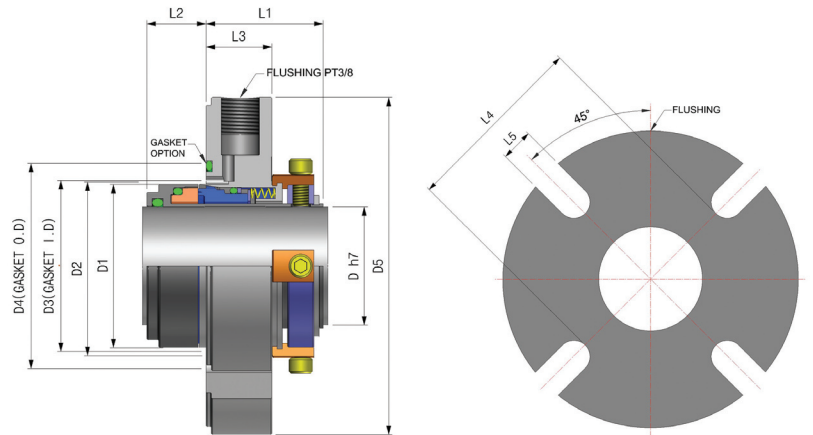
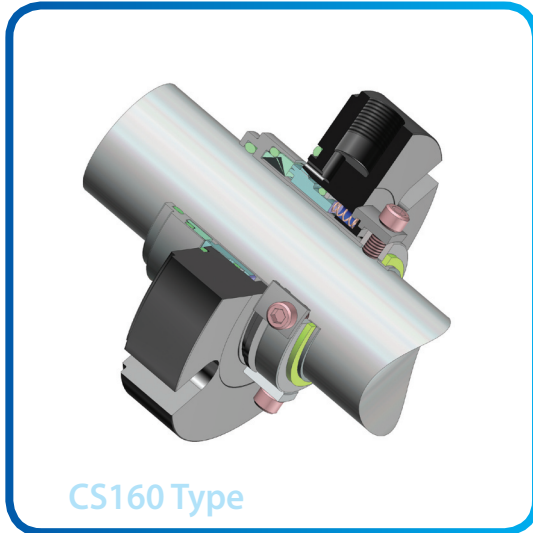
- Boiler circulation pump
- Boiler feed water pump
- Flowserve "QB" Series
- Compatible

● Design Feature

- High duty narrow rotating face design
- Spring holder pumping ring design option
- High balance seal face
- Multi flush option
- Lube design reduce heat generation Only API PLAN 11 Below 170°C (API PLAN 21 Over 170°C)

● 치수표 / Dimension

※ 해당 제품의 치수표는 당사에 문의해 주시기 바랍니다.



● 성능 / Performance

Max Pressure	20kg/cm ²
Max Temperature	-30 ~ 200°C
Max Speed	25m/s
Slurry	0.5wt%

● 용도 / Application

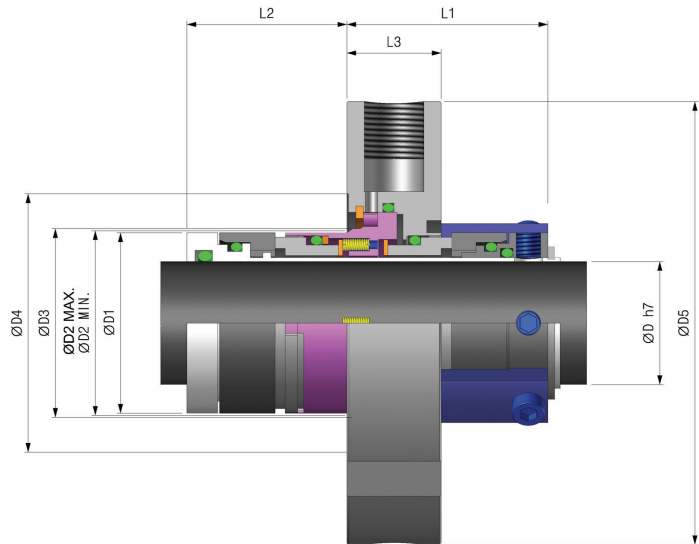
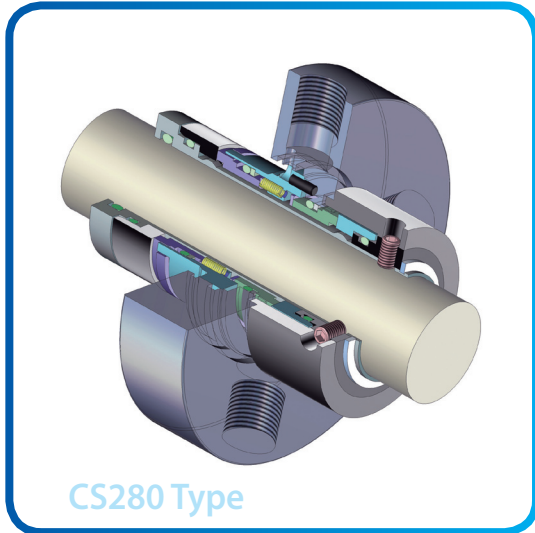
- Water, Slurry Water
- Non Crystallizing Acid,
- Salt
- Alkali, Hydrocarbon
- Hot Water

● Design Feature

- Single Cartridge Seal / Quenching option
- Multi-spring isolated fluid Mechanism
- Totally non fretting design
- Narrow Seal Face
- Available improvement conventional seal without modification of seal box

● 치수표

※ 해당 제품의 치수표는 당사에 문의해 주시기 바랍니다.



● 성능 / Performance

Max Pressure	20kg/cm ²
Max Temperature	-30 ~ 200°C
Max Speed	20m/s
Slurry	0.5wt%

● 용도 / Application

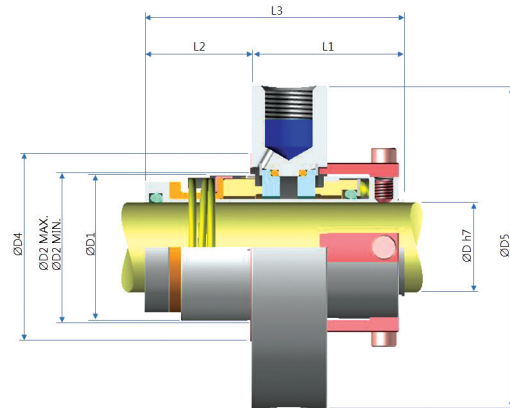
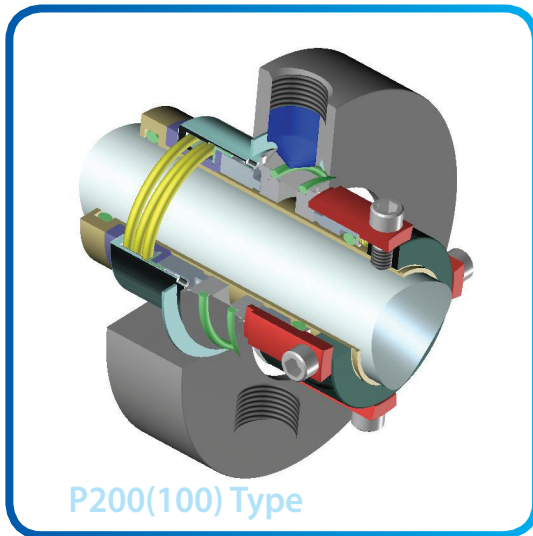
- Water, Slurry Water
- Non Crystallizing Acid,
- Salt
- Alkali, Hydrocarbon,
- Hot Water

● Design Feature

- Back to back double cartridge seal design
- Multi-spring isolated fluid Mechanism
- Totally non tretting design
- Narrow Seal Face
- Available improvement conventional seal without modification of seal box

● 치수표 / Dimension

※ 해당 제품의 치수표는 당사에 문의해 주시기 바랍니다.



● 성능 / Performance

Max Pressure	16kg/cm ²
Max Temperature	-30 ~ 160℃
Max Speed	20m/sec
Slurry	30wt%

● 용도 / Application

- High Viscosity Fluid
- Pulp, Paint Shop
- Media Containing Fluid
- Waste Water
- Water, Sea Water, Oil
- Sewage Application

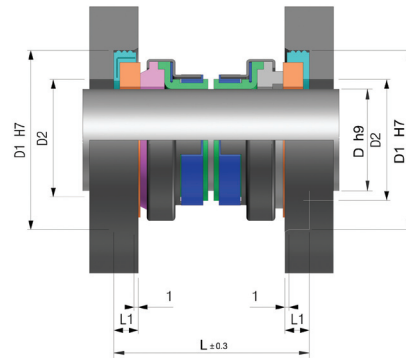
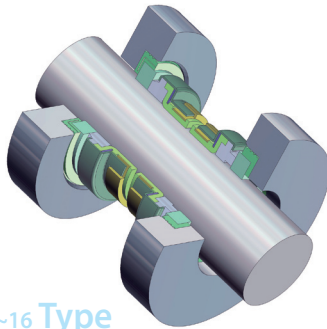
● Design Feature

- Single Spring / Multi / Spring Applicable(Based on MRH/SRH)
- Automatic alignment in abnormal shaft movement (run-out, seal face wear, equipment vibration)
- Mechanical Direct Drive : Eliminate overstress of the rubber bellows and reduce seal face slanting
- X-100, X-200 Completely Compatible

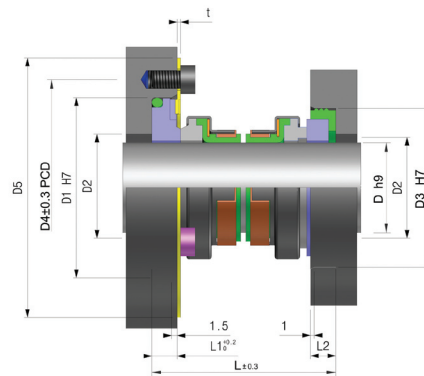
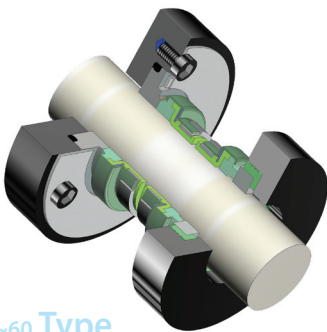
● 치수표

※ 해당 제품의 치수표는 당사에 문의해 주시기 바랍니다.

S200R 13~16 Type



S200R 20~60 Type



● 성능 / Performance

Max Pressure 3kg/cm²
 (Below ø 19 : 2kg/cm²)
 Max Temperature -20 ~ 70°C
 Max Speed 10m/s

● 용도 / Application

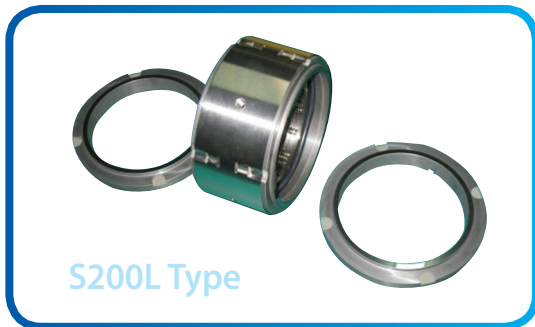
- Submersible Pump(수중펌프)
- Submersible Waste Water Pump
 (수중오폐수펌프)

● 재질 / Material

Seal Face
 Sic to Sic / Carbon to Ceramic
 Sic to Sic / Carbon to Sic
 Rubber Bellows NBR
 Metal SUS304

● 치수표 / Dimension

SIZE	D	D1	D2	D3	D4	D5	L	L1	L2	t
13	13	25	17	-	-	-	36	5	-	-
14	14	30	20	-	-	-	36	5	-	-
15	15	30	20	-	-	-	36	5	-	-
16	16	30	20	-	-	-	36	5	-	-
20	30	44	23	38	60	72	49	7	7	1.0
25	35	50	28	44	60	72	51	7	7	1.0
30	40	57	33	50	70	82	59	9	8	1.0
35	45	64	38	58	80	94	61	9	8	1.2
40	50	70	43	64	85	100	64.5	11	9	1.2
45	45	70	48	66	90	105	65	10	9	1.0
50	50	80	53	72	95	109	69.5	10	9	1.2
60	60	95	63	85	110	125	85.0	13	15	1.2
70	70	105	73	95	120	135	85.0	13	15	1.2



● 성능 / Performance

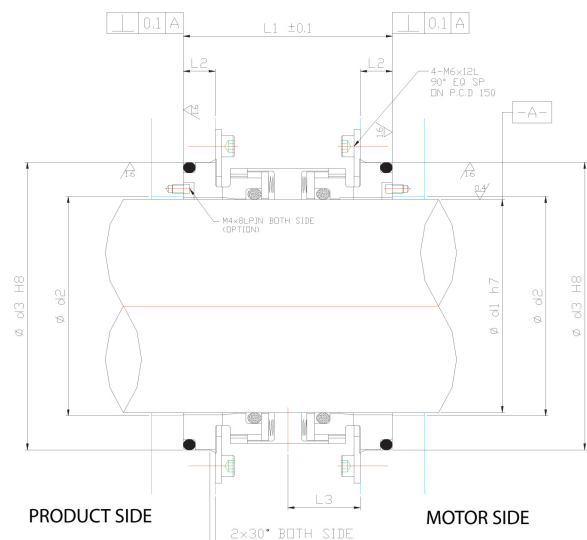
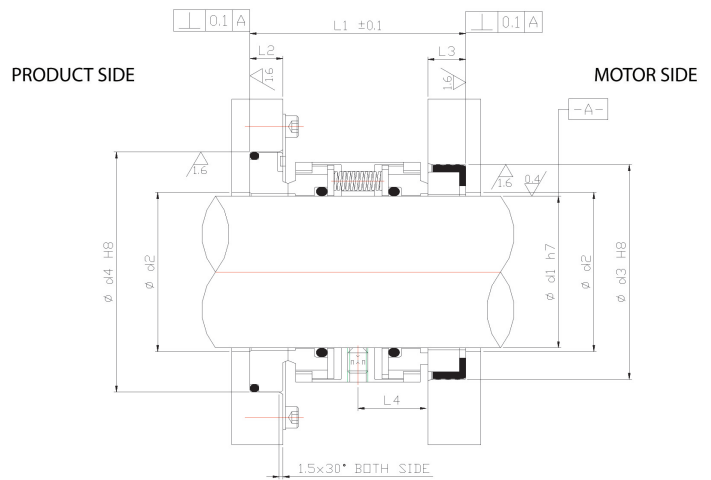
Max Pressure 12kg/cm²
 Max Temperature -50 ~ 200°C
 Max Speed 20m/s

● 용도 / Application

- Submersible Pump
- Water, Oil, etc
- Media containing solid in waste water and sewage applications

● Design Feature

- Free load structure and easy installation.
- No need any power or instrument when installation.
- Easy installation.
- Least effect reducing of sealing force depending on wear of seal face.
- Long life time.



● 치수표 / Dimension

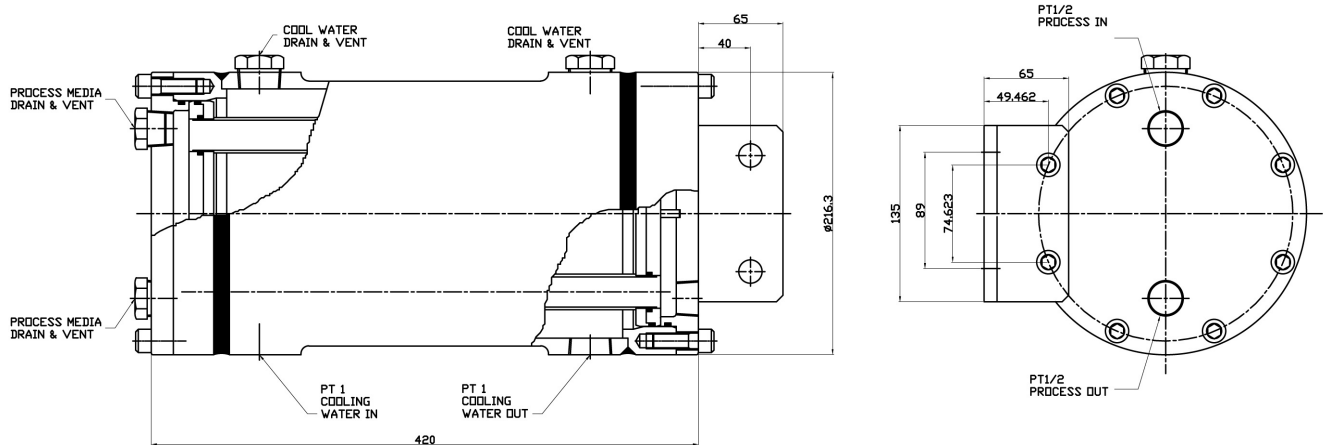
SIZE	d1	d2	d3	d4	L1	L2	L3	L4
035	35	38.0	54	54(57)	60	8.5	8.0	[21.5]
040	40	43.0	68	68(70)	65	10.5	9.0	[22.5]
045	45	48.0	68	68(70)	65	10.5	9.0	[22.5]
050	50	53.0	75	75(80)	75	10.0	12.0	[25.0]
060	60	63.0	85	85(95)	85	13.0	15.0	[27.5]
070	70	73.0	95	95(105)	85	13.0	15.0	[27.5]
080	80	83.0	115	-	98(105)	15.0	[34.0]	-
090	90	93.0	125	-	98(105)	15.0	[34.0]	-
100	100	103.0	135	-	98(105)	15.0	[34.0]	-
110	110	113.0	145	-	102(105)	15.0	[36.0]	-
120	120	123.0	155	-	102(105)	15.0	[36.0]	-
130	130	133.0	165	-	105	15.0	[37.5]	-
140	140	143.0	175	-	105	15.0	[37.5]	-
150	150	153.0	182	-	105	16.0	[36.5]	-
160	160	163.0	195	-	106	16.0	[37.0]	-
170	170	173.0	207	-	106	16.0	[37.0]	-
180	180	183.0	220	-	106	16.0	[37.0]	-

NOTE. 1. () DEPENDING ON CUSTOMER.
 2. [] REFERENCE DIMENSION.

● 그린포스, KSB, 윌로 펌프 전용 씰



● COOLER PCL420N



● 특징 / Design Features

- 수직, 수평 모두 설치 가능함
- 냉각수가 완전 순환이 가능하므로 냉각 효율이 높음
- 분해 청소가 가능한 구조임
- 위 치수 외 고객이 필요한 크기로 제작 가능

● 성능 / Specification

Descriptions	Tube	Shell
Working pressure(bar)	50	20
Working temperature(°C)	220	110
Cooling area(cm ²)	6000	
Tube length(mm)	360	
Tube size	27.2(3/4)-1.65(0.065")	
Net weight(kg)	40	

* 냉각효과 : 170°C IN → 100~110°C OUT (60~70°C 냉각)



(주)PLUS Manager

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