

UNITAS Q/UNITAS T

Applications: universal use



Technical description

Arrangement	Single
Design	Cartridge seal
Construction principle	Stationary
Balancing	Balanced
Springs	Multi-spring arrangement
Direction of rotation	Bi-directional

Materials

Primary ring	SiC (Q1) / resin-impregnated carbon (B) / antimony-impregnated carbon (A)
Mating ring	SiC (Q1)
Elastomers	EPDM (E) / FKM (V) / FFKM (K)
Springs	2.4610 (M)
Metallic components	1.4571 (G) / 1.4501 (G4) / 2.4610 (M)

Further material combinations and certificates on request

Technical data

Operating pressure	Up to 25 bar dynamic Up to 37.5 bar static
Temperature	-40 °C to 220 °C
Permissible axial movement	±1.5 mm*
Sliding velocity	20 m/s

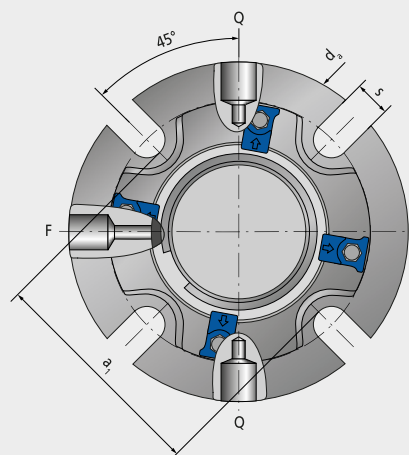
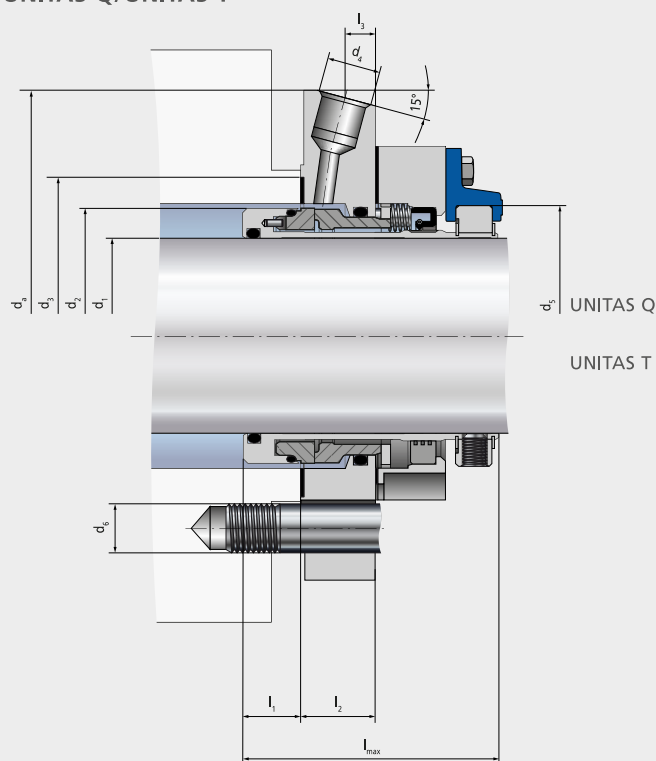
The temperature and pressure limits depend on the operating mode of the pump, the materials used and the type of fluid handled. Operation at the maximum limits is not possible for all operating parameters at the same time as the parameters influence each other during operation.

* ±2.0 mm from nominal diameter 075

Variants

UNITAS Q – with shaft seal ring for connection of a liquid quench
UNITAS T– with throttling bush for optional connection of a gas or steam quench

UNITAS Q/UNITAS T



- The springs of the stationary seal are located outside the fluid handled and therefore protected from contamination.
- Increased axial movement
- For universal use, further sizes and pump-specific variants on request

Dimensions for UNITAS Q/UNITAS T (in mm)

Nominal diameter	d ₁ F8	d ₂	d ₃	d ₄ NPT	d ₅	d ₆	d _a	l _{max} ¹⁾	l ₁	l ₂	l ₃	s	a ₁
028	28	46	59	1/4	46	M12	105	76,8	15,2	21	8,5	13,5	62
033	33	49,8	64	1/4	51	M12	108	76,7	15,6	21	8,5	13,5	67
038	38	56	73	3/8	56	M12	123	75,8	13,2	24,5	10	13,5	75
043	43	60,8	77,5	3/8	61	M12	133	82,4	15	24,5	10	13,5	80
045	45	62,5	79	3/8	63	M12	138	80,5	14,4	24,5	10	13,5	81
048	48	65,6	81	3/8	66	M12	138	81,3	14,2	24,5	10	13,5	84
050	50	68	83	3/8	68	M12	148	83,2	16,3	24,5	10	13,5	87
053	53	72	94	3/8	71	M16	148	83,6	16,5	24,5	10	17,5	97
055	55	73	88	3/8	73	M16	148	85,0	17,9	24,5	10	17,5	90
060	60	78	98	3/8	82	M16	157	87,0	19,8	24,5	10	17,5	102
065	65	85	105	3/8	87	M16	163	86,4	19,7	24,5	10	17,5	109
070	70	91,6	115	3/8	92	M16	178	88,5	19,9	24,5	10	17,5	118
075	75	100	125	3/8	101	M16	190	92,4	18,7	24,5	10	17,5	129
080	80	105,4	131	3/8	106	M16	195	96,1	22,4	24,5	10	17,5	135
085	85	109,5	136	3/8	111	M20	198	96,9	21,9	26	10	22	139
090	90	116	142	3/8	116	M20	205	101,6	22,9	26	10	22	145
095	95	119	145	3/8	121	M20	208	100,1	21,9	26	10	22	148
100	100	124,4	151	3/8	126	M20	218	100,9	22,2	26	10	22	154
110	110	138	163	3/8	136	M20	238	101,6	24,9	26	10	22	168
115	115	143	167	3/8	141	M20	243	101,2	24,4	26	10	22	172

¹⁾ l_{max} refers to the maximum length of the installed mechanical seal.