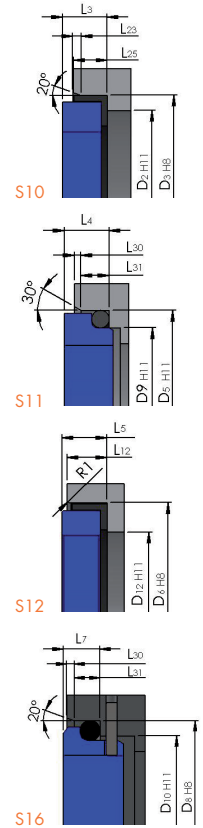


**Anelli stazionari opzionali**  
**Optional stationary rings**



**Descrizione prodotto**

Tenuta meccanica singola, bilanciata, indipendente dal senso di rotazione con configurazione multimolla. Le molle, racchiuse tra due o-ring non sono mai a contatto con il prodotto. E' la tenuta meccanica con il più ridotto ingombro assiale. Grazie alla possibilità di essere configurata con tutti gli anelli stazionari risulta intercambiabile con tutte le più conosciute tenute meccanica oggi presenti sul mercato. Grazie a questo vanto è stata definita dagli operatori del settore come "tenuta universale". Realizzata a norme UNI EN 12756 ex DIN 24960 viene realizzata in tutti i materiali compresi quelli plastici come PEEK e DIFLON. Per mezzo del design realizzativo resiste sino a 64 bar di pressione.

**Description**

Single mechanical seal, balanced, independent of the direction of rotation with multi-spring configuration. The springs are never in contact with the fluid. The MTM190 Series represents the mechanical seal with the most reduced axial dimensions. Thanks to the possibility to be configured with all the stationary rings, it is interchangeable with all the most famous mechanical seal on the market today. Source of proud, it has been defined by the industry as "Universal Seal". Made according to UNI EN 12756 ex DIN 24960 it is available in different materials including plastics such as PEEK and DIFLON. Thanks to its design it is able to resist up to 64 bar of pression.

**Materiale facce di contatto standard / Face materials**

Carburo di silicio / Silicon carbide  
Carburo di tungsteno / Tungsten carbide  
Grafite antimonio / Carbon graphite antimony  
Grafite resina / Carbon graphite resin  
Peek  
Diflon

**Materiale parti elastometriche / Elastomers**

FKM / Viton	FEP
EPDM / Ethylene propylene	ANELLO MLP PTFE / Memory
NBR / Nitrile	Lip PTFE
SILICONE / Silicon	PTFE / Wrapped PTFE
FFKM / Kalrez	
FFKM / Chemraz	

**Limiti d'impiego / Operating limits**

d = 12mm...to 200mm (0.47" to 7.87")  
P1 = 64 bar (up to 928 PSI)  
t = - 40 +220 °C (- 40 °F to + 428 °F)  
v = 32 m / s (up to 104 ft / s)  
Movimento Assiale / Axial Movement: + / - 1mm  
Vuoto = 0.5 bar (vacuum up to 7.25 PSI)

# Comp.	# Comp.	# Comp.
1 O-Ring	6 Rotary Ring Holder	11 O-Ring
2 Stat. Ring	7 O-Ring	12 Rotary Case
3 Pin	8 Spring	
4 O-Ring	9 Grub Screw	
5 Rotary Ring	10 Screw	

La configurazione del disegno è MTM200+S9  
The drawing configuration is MTM200+S9

**Dimensioni / Dimensions (mm)**

d h6	D1	D2 H11	D3 H8	D5 H8	D6 H8	D8 H8	D9 H11	D10 H11	D12 H11	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L16	L23	L24	L25	L30	L31
12	39	-	23	21,6	27,8	-	-	-	13,5	6,6	-	9	-	-	25,0	15,0	25,9	33,4	7,5	8,5	-	13,0	-	-	-
14	40	21	25	24,6	30,95	25	20,5	-	17	6,6	5,6	10,5	10	-	25,0	17,0	28,4	33,4	9	8,5	1,5	13,0	4	1,2	3,8
15	42	-	-	24,6	30,95	-	-	-	17	-	-	-	-	-	25,0	17,0	28,4	33,4	9	8,5	-	13,0	-	-	-
16	42	23	27	28	30,95	27	22	-	17	6,6	7,5	10,5	10	-	25,0	17,0	28,4	33,4	9	9,0	1,5	13,0	4	1,2	3,8
18	48	27	33	30	34,15	33	24	27	20	7,5	8	10,5	11,5	7,0	26,0	19,5	30,0	37,5	9	9,0	2,0	13,0	5	1,5	5
20	50	29	35	35	35,7	35	29,5	29	21,5	7,5	7,5	10,5	11,5	7,0	26,0	21,5	30,0	37,5	9	9,0	2,0	13,0	5	1,5	5
22	52	31	37	35	37,3	37	29,5	31	23	7,5	7,5	10,5	11,5	7,0	26,0	21,5	30,0	37,5	9	9,0	2,0	13,0	5	1,5	5
24	54	33	39	38	40,5	39	32	33	26,5	7,5	7,5	10,5	11,5	7,0	28,5	22,5	32,5	42,5	9	9,0	2,0	14,0	5	1,5	5
25	55	34	40	38	40,5	40	32	34	26,5	7,5	7,5	10,5	11,5	7,0	28,5	23,0	32,5	42,5	9	9,0	2,0	14,0	5	1,5	5
28	58	37	43	42	47,65	43	36	37	29,5	7,5	9	12	11,5	7,0	31,0	26,5	35,0	42,5	10,5	9,0	2,0	15,0	5	1,5	5
30	60	39	45	45	50,8	45	39,2	39	32,5	7,5	10,5	12	11,5	7,0	31,0	26,5	35,0	42,5	10,5	9,0	2,0	15,0	5	1,5	5
32	62	42	48	48	50,8	48	42,2	42	32,5	7,5	10,5	12	11,5	7,0	31,0	27,5	35,0	47,5	10,5	9,0	2,0	15,0	5	1,5	5
33	63	42	48	50	54	48	44,2	42	36,5	7,5	10,5	12	11,5	7,0	31,0	27,5	35,0	47,5	10,5	9,0	2,0	15,0	5	1,5	5
35	65	44	50	52	54	50	46,2	44	36,5	7,5	11	12	11,5	7,0	31,0	28,5	35,0	47,5	10,5	9,0	2,0	16,0	5	1,5	5
38	70	49	56	55	57,15	56	49,2	49	39,5	9	10,3	12	14	8,0	31,0	30,0	36,0	46,0	10,5	9,0	2,0	18,0	6	1,5	5
40	72	51	58	58	60,35	58	52,2	51	42,5	9	10,8	12	14	8,0	31,0	30,0	36,0	46,0	10,5	9,0	2,0	18,0	6	1,5	5
43	75	54	61	62	63,5	61	53,3	54	46	9	12	12	14	8,0	31,0	30,0	36,0	51,0	10,5	9,0	2,0	20,0	6	2,0	6
45	77	56	63	64	63,5	63	55,3	56	46	9	11,6	12	14	8,0	31,0	30,0	36,0	51,0	10,5	9,0	2,0	20,0	6	2,0	6
48	80	59	66	68,4	66,7	66	59,7	59	46	9	11,6	12	14	8,0	31,0	30,5	36,0	51,0	10,5	9,0	2,0	23,0	6	2,0	6
50	82	62	70	69,3	69,85	70	60,8	62	49	9,5	11,6	13,5	15	9,5	32,5	30,5	38,0	50,5	12	9,0	2,5	23,0	6	2,0	6
53	85	65	73	72,3	73,05	73	63,8	65	52	11	12,3	13,5	15	9,5	32,5	33,0	36,5	59,0	12	9,0	2,5	23,0	6	2,0	6
55	87	67	75	75,4	76,2	75	66,5	67	55,5	11	13,3	13,5	15	9,5	32,5	35,0	36,8	59,0	12	9,0	2,5	23,0	6	2,0	6
58	94	70	78	78,4	79,4	78	69,5	70	58,5	11	13,3	13,5	15	10,5	37,5	37,0	41,5	59,0	12	9,0	2,5	30,0	6	2,0	6
60	96	72	80	80,4	79,4	80	71,5	72	61,5	11	13,3	13,5	15	10,5	37,5	38,0	41,5	59,0	12	9,0	2,5	30,0	6	2,0	6
63	99	75	83	83,4	-	83	74,5	75	61,5	11	13,3	-	15	10,5	37,5	40,0	41,5	-	14,5	9,0	2,5	30,0	6	2,0	6
65	101	77	85	85,4	92,1	85	76,5	77	68	11	13	16	15	10,5	37,5	40,0	41,5	69,0	14,5	9,0	2,5	30,0	6	2,0	6
68	104	81	90	91,5	95,25	90	82,7	81	71	11,3	13,7	16	18	11,0	34,5	40,0	41,2	68,7	14,5	9,0	2,5	32,0	7	2,0	6
70	106	83	92	92	95,25	92	83	83	71	11,3	13	16	18	11,5	42,0	40,0	48,7	68,7	14,5	9,0	2,5	32,0	7	2,0	6
75	114	88	97	99	101,6	97	90,2	88	77,5	11,3	14	16	18	11,5	42,0	40,0	48,7	68,7	14,5	9,0	2,5	32,0	7	2,0	6
80	119	95	105	104	114,3	105	95,2	95	84	12	15	20	18,2	11,5	41,8	40,0	48,0	78,0	18,5	9,0	3,0	32,0	7	2,0	6
85	124	100	110	109	117,5	110	100,2	100	87	14	14,8	20	18,2	11,5	41,8	41,0	46,0	76,0	18,5	9,0	3,0	32,0	7	2,0	6
90	129	105	115	114	123,85	115	105,2	105	93,5	14	14,8	20	18,2	13,0	46,8	45,0	51,0	76,0	18,5	9,0	3,0	32,0	7	2,0	6
95	134	110	120	120,3	127	120	111,6	110	96,5	14	15,8	20	17,2	13,0	47,8	46,0	51,0	76,0	18,5	9,0	3,0	32,0	7	2,0	6
100	139	115	125	123,3	133,35	125	114,5	115	103	14	15,8	20	17,2	13,0	47,8	47,0	51,0	76,0	18,5	9,0	3,0	32,0	7	2,0	6

Le dimensioni potrebbero essere soggette a modifiche o varianti da parte di Microtem.  
Dimensions could be subject to change from Microtem.

**Applicazioni / Recommended applications**

Acque bianche e acque grigie / Water and sewage water pumps  
 Industria di processo / Process industry  
 Industria chimica / Chemical industry  
 Industria alimentare / Food and beverage industry  
 Industria cartaria / Pulp and paper industry  
 Industria petrolifera / Refinery industry  
 Industria farmaceutica / Pharmaceutical industry  
 Industria energetica / Power plant industry  
 Zuccherifici / Sugar industry  
 Pompe centrifughe / Centrifugal pumps  
 Pompe Marine / Marine pumps  
 Pompe Olio combustibile / Fuel oil pumps  
 Pompe di lubrificazione / Lube oil pumps  
 Pompe a viti / Screw pumps  
 Pompe a ingranaggi / Gear pumps  
 Pompe motori / Engine pumps  
 Compressori lubrificati / Lube compressors  
 Elevato contenuto di solidi e abrasivi / High abrasive and solids content  
 Elevata viscosità / High viscosity  
 Temperature elevate / Hot applications  
 Macchine rotanti speciali / Special rotating equipment  
 Pompe per lavastoviglie / Dishwasher pumps  
 Compressori lubrificati / Lube compressors  
 Basso contenuto di solidi / Low solids content  
 Temperature elevate / Hot applications  
 Olii / Oils  
 Glicoli / Glycols  
 Macchine rotanti speciali / Special rotating equipment