



Profile	Reference	Press. ≤ (MPa)*	Temp. (°C)*	Speed (m/s)*	Material	Dimensions (mm)	mm	inch	Page
4a Double acting piston seals									
	10TPI	35	-35 +100	0,5	NBR/POM	7/8" ... 12"		●	506 - 507
	10DBS.../AE	40	-40 +110	0,5	NBR/POM/TPE	32 ... 150	●		508 - 509
	10DPC.../NEO	50	-30 +100	0,5	NBR-C/NBR/POM	50 ... 280	●		510 - 511
	12TDMA	25	-35 +100	1	PU/PTFE	50 ... 280	●		512 - 513
	10TDO	4	-30 +100	0,5	NBR/Met.	26 ... 300	●		514 - 515
	10GPS	40	-30 +100	0,5	PU/NBR	12 ... 250	●		516 - 519
	10GPS.../LP	25	-30 +100	0,5	PU/NBR	12 ... 250	●		516 - 519
	10E/GH	50	-30 +100	0,5	TPE/NBR	12 ... 140	●		520 - 521
	10GPSK	40	-30 +100	0,5	PU/NBR	20 ... 200	●		522 - 523
	10EPK	40	-30 +100	0,5	PU+MoS ₂ /NBR	25 ... 320	●		524 - 525
	10BFP	40	-40 +90	1	PU	25 ... 230	●		526 - 527
	10GPC/I	34	-30 +110	0,5	PU/NBR	2" ... 6"		●	528 - 529
	10GPK	80	-30 +100	1	PA/NBR	40 ... 320	●		530 - 531
	10E/GR...A	50	-30 +100	15	PTFE/NBR	10 ... 600	●		532 - 537
	10E/GRINCH...A	50	-30 +100	15	PTFE/NBR	1,5" ... 6"	●		538 - 539
	11E/GR...A	50	-10 +200	15	PTFE/FPM	25 ... 250	●		540 - 541
	12GODA	36	-35 +100	1	PTFE/NBR	40 ... 200	●		542 - 543
	10E/GRKA	50	-30 +100	15	PTFE/NBR	25 ... 320	●		544 - 545
	12GGDA	45	-35 +100	1	PTFE/POM/NBR	80 ... 250	●		546 - 547
	10PHD	40	-30 +110	1,5	PTFE/NBR/POM	40 ... 320	●		548 - 549
	10PHD.../PU	40	-30 +110	0,5	PU/NBR/POM	50 ... 250	●		550 - 551
	10KRGG	200	-60 +250	40	Cast iron	25 ... 180	●	●	552 - 553

* See page 8

Profile	Reference	Press. ≤ (MPa) *	Temp. (°C) *	Speed (m/s) *	Material	Dimensions (mm)	mm	inch	Page
4b Double acting piston seals with guide rings									
	10DBS 10DBS/I	35	-30 +100	0,5	NBR/TPE/POM	20 ... 320 1,5" ... 7"	●	●	554 - 561 564 - 565
	11DBS...FPM	35	-10 +120	0,5	FPM/TPE/POM	40 ... 110	●		562 - 563
	11DBS...FPM/PT	35	-10 +120	0,5	FPM/PT01/PT55	40 ... 100	●		562 - 563
	10DCS	25	-30 +100	0,5	NBR/PTFE/POM	25 ... 125	●		566 - 567
	10DSM	70	-40 +130	0,5	NBR/NBR-C/POM	45 ... 380	●	●	568 - 569
	10DPS	35	-30 +130	0,5	NBR-C/NBR/POM	25 ... 250	●	●	570 - 571
	11DPS...FPM-C	35	-10 +150	0,5	FPM-C/FPM/PTFE	50 ... 140	●		572 - 573
	10D11W	50	-30 +100	0,5	NBR/NBR-C/POM	38,1 ... 300	●	●	574 - 575
	10D11W.../H	40	-30 +100	0,5	NBR/NBR-C/POM	25 ... 177,8	●	●	576 - 577
	10EUD.../P	40	-30 +100	0,5	PU/POM	25 ... 110	●		578 - 579
	12GD1000K	36 (63)	-30 +120 -45 +120	1	PTFE/NBR/TPE/POM	40 ... 600	●		580 - 585
	12GKD	36 (63)	-35 +100	1	PTFE/PU/POM	40 ... 280	●		586 - 587

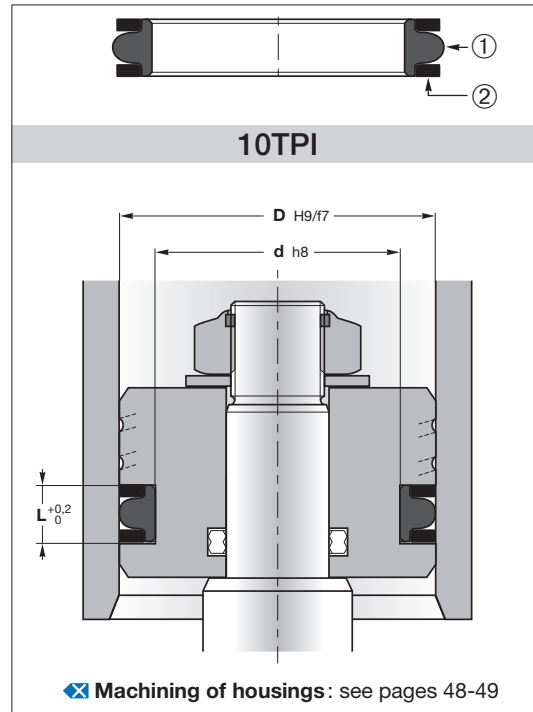
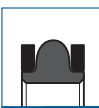
* See page 8

Profile	Reference	Press. ≤ (MPa) *	Temp. (°C) *	Speed (m/s) *	Material	Dimensions (mm)	mm	inch	Page
4c Single acting piston seals									
	10DC	4	-30 +100	0,25	NBR	7/16" ... 16"		●	588 - 589
	10DDE 10DDEM	8	-30 +100	0,5	NBR	1/2" ... 12" 12 ... 250	●	●	590 - 591 592 - 593
	10DDEM.../C	12	-30 +100	0,5	NBR	20 ... 200	●		594 - 595
	11DDEM.../C FPM	12	-10 + 200	0,5	FPM	20 ... 200	●		596 - 597
	10DUM 10DU	10	-15 +120	0,5	NBR	12 ... 500 3/8" ... 6"1/4	●	●	598 - 601 602 - 603
	10DUM.../N	10	-30 +100	0,5	NBR	12 ... 140	●		604 - 607
	10B.../NWO/KR	50	-30 +120	0,5	NBR/NBR-C/POM	35 ... 125	●		608 - 609
	10DS	25	-40 +120	0,5	NBR-C/NBR	24 ... 300	●		610 - 611
	10DS.../NEO	50	-40 +120	0,5	NBR-C/NBR/POM	63 ... 160	●		612 - 613
	10DS.../M	40	-40 +120	0,5	NBR-C	40 ... 200	●		614 - 615
	10CH3	40	-30 +120	0,5	NBR-C/POM	30 ... 300	●		616 - 617
	11CH3 FPM-C	40	-10 +150	0,5	FPM-C	40 ... 300	●		618 - 619
	10MU	40	-30 +100	0,5	PU	9 ... 380	●		620 - 637
	10RSE	40	-30 +100	0,5	PU	14 ... 280	●		638 - 641
	12TDA	36 (63)	-35 +100	1	PU/PTFE	50 ... 250	●		642 - 643
	10RSE.../AE	50	-30 +100	0,5	PU/POM	40 ... 250	●		644 - 645
	10RSE.../W/AR	40	-30 +100	0,5	PU/POM	32 ... 140	●		646 - 647
	10EUS/I	40	-30 +100	0,5	PU/NBR	1/2" ... 8"1/2	●		648 - 651
	10E/GR...B	50	-30 +100	15	PTFE/NBR	14 ... 250	●		652 - 653
	10VOP	20	-70 +260	15	PT02/SS	25 ... 200	●	●	654 - 655



Profile	Reference	Press. ≤ (MPa) *	Temp. (°C) *	Speed (m/s) *	Material	Dimensions (mm)	mm	inch	Page
4d TSS piston seals									
	10DBM	35	-30 +100	0,5	NBR/TPE/POM	40 ... 220	●	●	656 - 657
	Polypac® Balemaster								
	10EUD	40	-30 +100	0,5	PU/NBR/POM	50 ... 125	●		658 - 659
	Polypac® Euroseal								
	10DPC	50	-30 +120	0,5	NBR-C/POM	30 ... 150	●		660 - 661
	Polypac® Duopac								
	17PT...-T/M...N	50	-30 +100	15	Turcon® T46/NBR	10 ... 500	●		662 - 665
	Turcon® Glyd Ring® T								
	17PT...-T/M...V	50	-20 +200	15	Turcon® T46/FPM	10 ... 500	●		666 - 669
	Turcon® Glyd Ring® T								
	17PSK...-T/M...N	50	-30 +100	15	Turcon® T46/NBR	14 ... 420	●		670 - 671
	Turcon® Stepseal® 2K								
	17PSK...-T/M...V	50	-20 +200	15	Turcon® T46/FPM	14 ... 420	●		672 - 673
	Turcon® Stepseal® 2K								
	17PSV...-T/M...N	50	-30 +100	15	Turcon® T46/NBR Turcon® M12/NBR	56 ... 400	●		674 - 675
	Turcon® Stepseal® V								
	17PSV...-T/M...V	50	-20 +200	15	Turcon® T46/FPM Turcon® M12/FPM	56 ... 400	●		676 - 677
	Turcon® Stepseal® V								
	17PQ	40	-30 +100 -20 +200	2	Turcon® T46/NBR Turcon® T46/FPM	16 ... 400	●		678 - 681
	Turcon® AQ Seal®								
	17PQ0	50	-30 +100 -20 +200	3	Turcon® T46/NBR Turcon® T46/FPM	32 ... 540	●		682 - 683
	Turcon® AQ Seal® 5								
	17PDD	35	-30 +100 -20 +200	15	Turcon® T46/NBR Turcon® T46/FPM	16 ... 200	●		684 - 685
	Turcon® Double Delta®								
	17PVA	40	-70 +260	15	Turcon® T40/SS	10 ... 200	●		686 - 687
	Turcon® Variseal® M2								

* See page 8



10TPI piston T-seal combines a resilient sealing ring with a hard split back-up ring on each side of the sealing element.

Its compact design provides improved stability and extrusion resistance in dynamic fluid sealing applications. The flange or base of the T-seal forms a tight seal in the gland and supports the anti-extrusion back-up rings.

The Piston T-seal **eliminates** the spiral or twisting failure that can occur when O-rings are used against a dynamic surface.

Operating conditions $\otimes$ see page 8

Pressure	≤ 35 MPa
Temperature	-35°C to 100°C
Speed	$\leq 0,5$ m/s
Fluids	$\otimes$ see pages 22-45

Materials $\otimes$ see pages 10-19

Seal ①	NBR1970
Anti-extrusion rings ②	POM

Assembly $\otimes$ see pages 54-59

On one-piece pistons

Advantages

Compact design
High extrusion resistance
Easy to fit
Double acting
No twisting

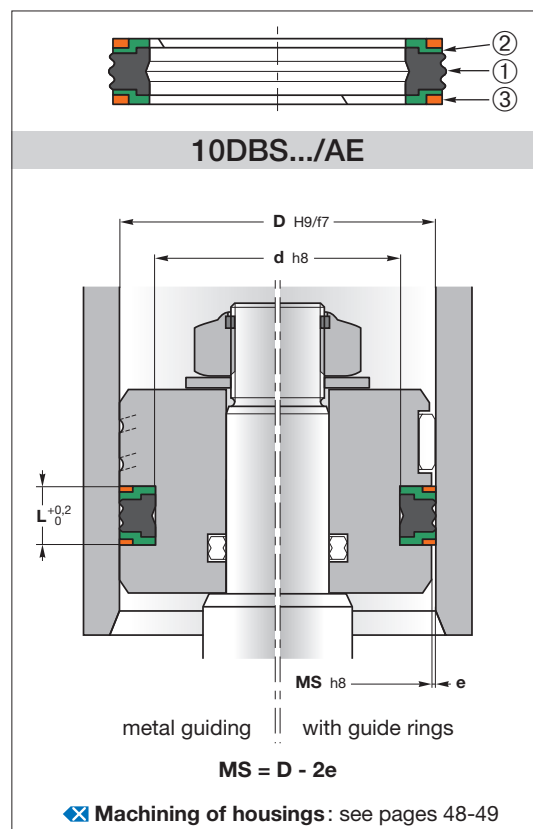
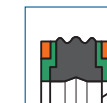
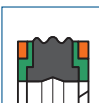
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	Reference
22,22	16,05	4,7	10TPI 0875
25,4	19,25	4,7	10TPI 1000
28,57	22,43	4,7	10TPI 1125
31,75	25,6	4,7	10TPI 1250
34,92	28,78	4,7	10TPI 1375
38,1	31,95	4,7	10TPI 1500
41,27	35,13	4,7	10TPI 1625
44,45	38,3	4,7	10TPI 1750
47,62	38,21	7,11	10TPI 1875
50,8	41,38	7,11	10TPI 2000
53,97	44,55	7,11	10TPI 2125
57,15	47,73	7,11	10TPI 2250
60,32	50,91	7,11	10TPI 2375
63,5	54,08	7,11	10TPI 2500
66,67	57,25	7,11	10TPI 2625
69,85	60,43	7,11	10TPI 2750
73,02	63,63	7,11	10TPI 2875
76,2	66,78	7,11	10TPI 3000
79,37	69,96	7,11	10TPI 3125
82,55	73,15	7,11	10TPI 3250
88,9	79,48	7,11	10TPI 3500
92,07	82,66	7,11	10TPI 3625
95,25	85,83	7,11	10TPI 3750
98,42	89,01	7,11	10TPI 3875
101,6	92,18	7,11	10TPI 4000
104,77	95,36	7,11	10TPI 4125
107,95	98,53	7,11	10TPI 4250

D	d	L	Reference
111,12	101,71	7,11	10TPI 4375
114,3	104,88	7,11	10TPI 4500
120,65	111,23	7,11	10TPI 4750
123,82	114,41	7,11	10TPI 4875
127	117,65	7,11	10TPI 5000
130,17	118,16	9,3	10TPI 5125
133,35	121,34	9,3	10TPI 5250
139,7	127,69	9,3	10TPI 5500
146,05	134,04	9,3	10TPI 5750
149,23	137,21	9,3	10TPI 5875
152,4	140,39	9,3	10TPI 6000
158,75	146,74	9,3	10TPI 6250
165,1	153,11	9,3	10TPI 6500
177,8	165,81	9,3	10TPI 7000
190,5	178,51	9,3	10TPI 7500
203,2	191,21	9,3	10TPI 8000
209,55	197,56	9,3	10TPI 8250
215,9	203,89	9,3	10TPI 8500
228,6	216,61	9,3	10TPI 9000
241,3	229,31	9,3	10TPI 9500
254	242,01	9,3	10TPI 10000
266,7	254,71	9,3	10TPI 10500
279,4	267,41	9,3	10TPI 11000
292,1	280,04	9,3	10TPI 11500
304,8	292,81	9,3	10TPI 12000



10DBS.../AE is a sealing rubber element with low permanent deformation which provides good sealing performance. Three compact and small seal edges ensure perfect fluid control. Two anti-extrusion rings with stabilisers avoid the rotation of the rubber element.

The **special geometry** of the seals ensures that the pressure pre-loads the energising element without any risk of extrusion.

Operating conditions ✕ see page 8

Pressure	≤ 40 MPa
Temperature	-40°C to 110°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Seal ①	NBR2475
Anti-extrusion rings ②	TPE63
Anti-extrusion rings ③	POM24

Assembly ✕ see pages 54-59

On one-piece pistons

Advantages

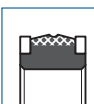
- Good sealing effect
- Excellent extrusion resistance
- Excellent wear resistance
- Perfect fluid control
- Easy installation on monobloc pistons

Please contact us for applications approaching maximum values.

More information

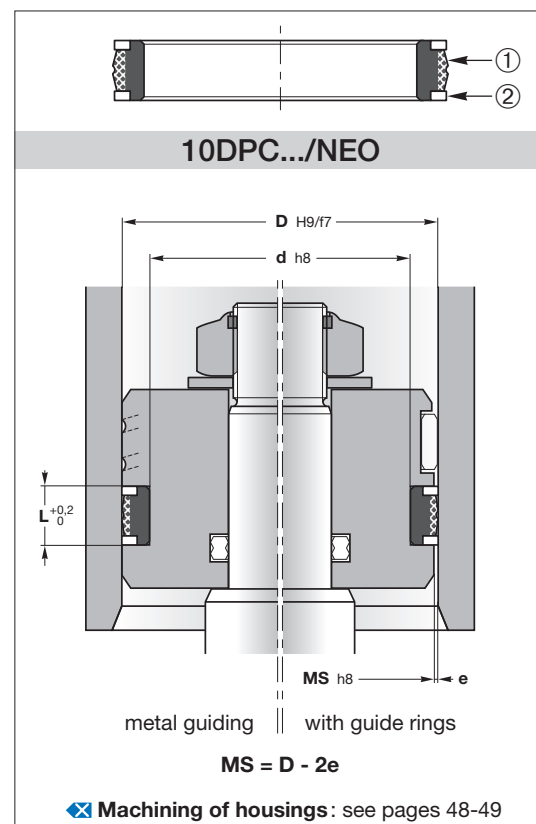
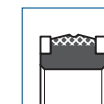
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	MS	Reference
32	22	16,4	31	10DBS 3222/AE
40	30	16,4	39	10DBS 4030/AE
50	34	18,4	49	10DBS 5034/AE
60	44	18,4	58,7	10DBS 6044/AE
63	47	18,4	61,7	10DBS 6347/AE
70	50	22,4	68,4	10DBS 7050/AE
75	55	22,4	73,4	10DBS 7555/AE
80	60	22,4	78,4	10DBS 8060/AE
85	65	22,4	83,4	10DBS 8565/AE
105	80	22,4	103	10DBS 10580/AE
150	125	25,4	147,5	10DBS 150125/AE



10DPC.../NEO

Fabric double acting piston seal with back-up rings



10DPC.../NEO is a double acting seal composed of a sealing rubber reinforced element and two back-up rings. The dynamic side of the rubber part is fabric reinforced. Fabric reinforced nitrile elastomer has a higher mechanical strength and better lubricating properties.

Operating conditions ✕ see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Seal ①	NBR fabric/NBR
Anti-extrusion rings ②	Acetal resin

Assembly ✕ see pages 54-59

On one-piece pistons

Advantages

- Efficient sealing effect at high and low pressure
- Good dynamic and static friction behavior
- Low friction
- High pressure
- Improved abrasion resistance

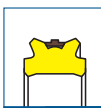
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	26 MPa	32 MPa	40 MPa	50 MPa
	e (mm)			
≤ 80	0,6	0,55	0,45	0,35
> 80	0,65	0,6	0,5	0,4

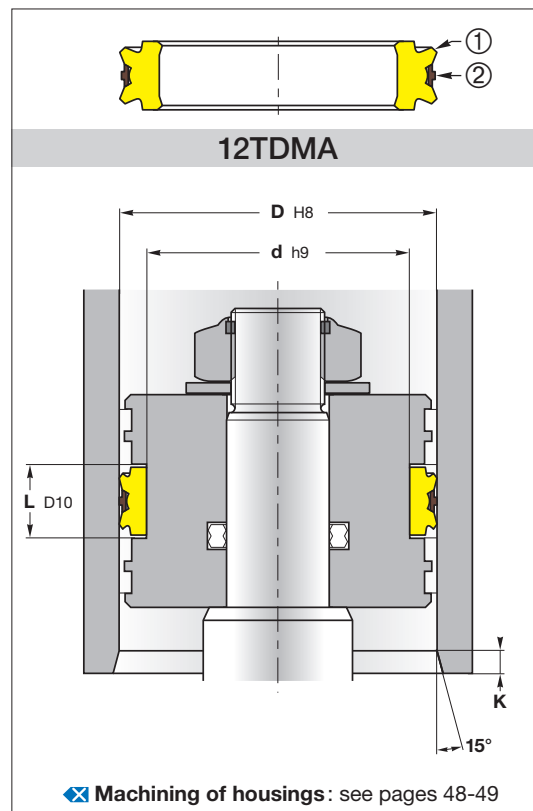
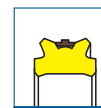
D	d	L	Reference
50	38	14,5	10DPC 5038/NEO
63	51	14,5	10DPC 6351/NEO
80	66	16,5	10DPC 8066/NEO
90	76	16,5	10DPC 9076/NEO
100	86	16,5	10DPC 10086/NEO
110	95	15,5	10DPC 11095/NEO
120	105	15,5	10DPC 120105/NEO
130	113	20,5	10DPC 130113/NEO
130	115	16	10DPC 130115/NEO
140	125	15,9	10DPC 140125/NEO
200	180	15,5	10DPC 200180/NEO
225	205	24,5	10DPC 225205/NEO
250	230	25,5	10DPC 250230/NEO
280	255	24,8	10DPC 280255/NEO



12TDMA

PU/PTFE double acting piston seals

HUNGER
Dichtungen



Hunger® **12TDMA** tandem seal recommended for use where different fluids on each side are to be separated.

Due to its good dry running properties, it can be used as a fluid seal on one side and simultaneously as a dirt wiper on the other side.

12TDMA seal consists of 2 parts, an elastic ring of PU with two sealing lips and a slide ring of abrasion resistant PTFE-Bronze-compound with a sealing edge.

Prior to fitting, the sealing lip protrudes beyond the nominal diameter of the seal and is pressed against the cylinder wall after fitting. Thus **effective sealing** is provided even at zero pressure.

Operating conditions see page 8

Pressure	≤ 25 MPa
Temperature	-35°C to 100°C
Speed	≤ 1 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal ①	PU
Dynamic sealing element ②	PTFE bronze

Assembly see pages 54-59

First insert the PU ring into the groove. After extending the PTFE ring, assemble it on the PU-ring and finally calibrate it.

Advantages

- Efficient sealing even at low pressures
- Compact seal
- Easy to assemble
- Excellent abrasion resistance
- Minimum friction level
- Long service life

Please contact us for applications approaching maximum values.

More information

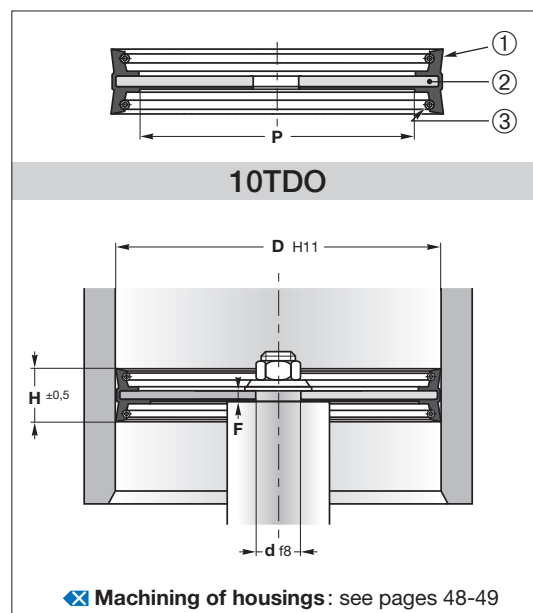
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	K	HUNGER reference	Reference
40	30	16	7	010402	12TDMA 40
45	35	16	7	010406	12TDMA 45
50	40	16	7	010408	12TDMA 50
63	53	16	7	010412	12TDMA 63
70	60	16	7	010414	12TDMA 70
100	90	16	7	010422	12TDMA 100
125	113	16	10	010427	12TDMA 125
180	168	16	10	010437	12TDMA 180
250	238	16	10	010447	12TDMA 250
320	306	16	15	010456	12TDMA 320



10TDO

Complete piston



10TDO is a complete piston with steel base plate and vulcanised, springloaded sealing lips.

The complete piston is for low duty applications, preferably for spare parts requirement.

The seal can only absorb **low lateral forces**.

Operating conditions see page 8

Pressure	≤ 4 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal ①	NBR0083 with carbon steel inside
Core ②	Steel
Spring (2 x) ③	Steel

Assembly see pages 54-59

Mounted with rubber side towards the rod and fixed with screw and washer

Advantages

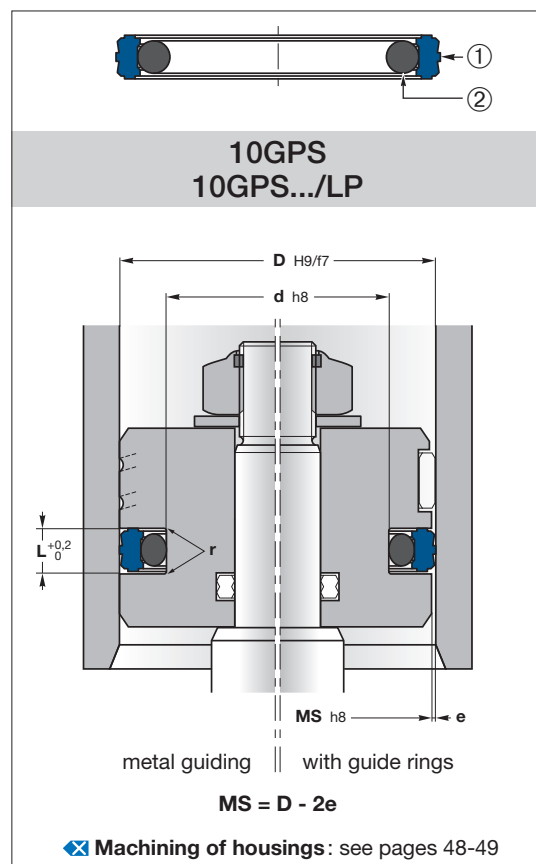
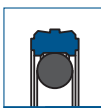
Complete piston for low duty applications

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	P	H	F	Reference
26	8,2	15	22	3	10TDO 026
30	8,2	16	22	3	10TDO 030
35	8,2	20	26	3	10TDO 035
40	10,2	20	22	3	10TDO 040
45	10,2	22	25	4	10TDO 045
50	10,2	27	25	4	10TDO 050
55	10,2	32	25	4	10TDO 055
60	12,2	37	26	4	10TDO 060
63	12,2	40	25	4	10TDO 063
70	12,2	44	30	5	10TDO 070
80	12,2	54	30	5	10TDO 080
100	12,2	72	35	6	10TDO 100
110	12,2	78	40	6	10TDO 110
115	20,2	83	30	8	10TDO 115
125	20,2	85	40	8	10TDO 125
140	20,2	100	40	10	10TDO 140
150	20,2	105	40	10	10TDO 150
160	20,2	115	40	10	10TDO 160
180	20,2	130	40	10	10TDO 180
200	20,2	146	40	10	10TDO 200
250	30,2	200	40	12	10TDO 250
300	35,2	250	40	12	10TDO 300



10GPS seal is designed with a seal edge profile. Two external seal edges act as primary seal for pressures from both sides and prevent any build-up of hydrodynamic pressure over the seal profile and the risk of the blow-by effect.

The central sealing and supporting bulge increases the sealing effect.

Sides grooves ensure that the pressure pre-loads the energising element in all work conditions.

Operating conditions ✕ see page 8

Pressure	
10GPS	≤ 40 MPa
10GPS.../LP	≤ 25 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Dynamic sealing element ①	
10GPS	PU24, PU25 or PU38
10GPS.../LP	PU09 or Z20
Energising element ②	NBR 70 Sh A

Assembly ✕ see pages 54-59

On one-piece pistons

Advantages

- Efficient sealing
- Excellent abrasion resistance
- Easy installation on monobloc pistons
- Small sections

Please contact us for applications approaching maximum values.

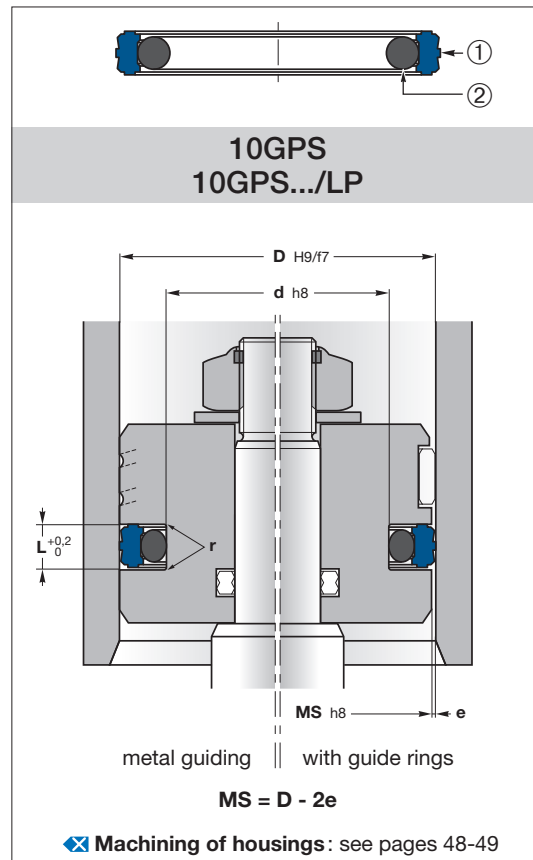
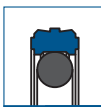
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

L (mm)	e (mm)	
	10GPS	10GPS.../LP
2,2	≤ 0,2	≤ 0,15
3,2	≤ 0,25	≤ 0,2
4,2	≤ 0,25	≤ 0,2
6,3	≤ 0,3	≤ 0,25
8,1	≤ 0,3	≤ 0,25

D	d	L	r	ISO 7425/1	Reference
12	7,1	2,2	0,2		10GPS 12/LP
15	7,5	3,2	0,2		10GPS 15
16	8,5	3,2	0,2	•	10GPS 16
20	12,5	3,2	0,2	•	10GPS 20
22	14,5	3,2	0,2		10GPS 22
24	16,5	3,2	0,2		10GPS 24/LP
25	14	4,2	0,4	•	10GPS 25
25	17,5	3,2	0,2	•	10GPS 25/1
30	22,5	3,2	0,2	•	10GPS 30
32	21	4,2	0,4	•	10GPS 32
32	24,5	3,2	0,2	•	10GPS 32/1
34	26,5	3,2	0,2		10GPS 34/LP
35	24	4,2	0,4		10GPS 35/1/LP
35	27,5	3,2	0,2		10GPS 35
36	25	4,2	0,4		10GPS 36/1/LP
36	28,5	3,2	0,2		10GPS 36/LP
38	30,5	3,2	0,2		10GPS 38/LP
40	24,5	6,3	0,5		10GPS 40
40	29	4,2	0,4	•	10GPS 40/1
40	29	4,2	0,4	•	10GPS 40/1/LP
40	32,5	3,2	0,2		10GPS 40/2
42	31	4,2	0,4		10GPS 42/LP
45	29,5	6,3	0,5		10GPS 45
45	29,5	6,3	0,5		10GPS 45/LP
45	34	4,2	0,4		10GPS 45/1
48	37	4,2	0,4		10GPS 48/LP
49	38	4,2	0,4		10GPS 49
50	34,5	6,3	0,5	•	10GPS 50
50	39	4,2	0,4	•	10GPS 50/1
50	39	4,2	0,4	•	10GPS 50/1/LP
50,8	39,8	4,2	0,4		10GPS 50.8/LP
52	36,5	6,3	0,5		10GPS 52
54	43	4,2	0,4		10GPS 54
55	39,5	6,3	0,5		10GPS 55
55	44	4,2	0,4		10GPS 55/1
56	45	4,2	0,4		10GPS 56/LP
57	46	4,2	0,4		10GPS 57/LP
60	44,5	6,3	0,5		10GPS 60
60	49	4,2	0,4		10GPS 60/1

D	d	L	r	ISO 7425/1	Reference
63	47,5	6,3	0,5	•	10GPS 63
63	52	4,2	0,4	•	10GPS 63/1
63,5	52,5	4,2	0,4		10GPS 63.5/LP
65	49,5	6,3	0,5		10GPS 65
65	54	4,2	0,4		10GPS 65/1
65	54	4,2	0,4		10GPS 65/1/LP
70	54,5	6,3	0,5		10GPS 70
70	54,5	6,3	0,5		10GPS 70/LP
70	59	4,2	0,4		10GPS 70/1
72	61	4,2	0,4		10GPS 72/LP
74	58,5	6,3	0,5		10GPS 74/LP
75	59,5	6,3	0,5		10GPS 75
75	64	4,2	0,4		10GPS 75/1
76,5	65,5	4,2	0,4		10GPS 76.5/LP
80	64,5	6,3	0,5	•	10GPS 80
80	64,5	6,3	0,5	•	10GPS 80/LP
80	69	4,2	0,4	•	10GPS 80/1
85	69,5	6,3	0,5		10GPS 85
88,9	73,4	6,3	0,5		10GPS 88.9/LP
90	69	8,1	0,6		10GPS 90/1
90	74,5	6,3	0,5		10GPS 90
95	79,5	6,3	0,5		10GPS 95
100	84,5	6,3	0,5	•	10GPS 100
100	84,5	6,3	0,5	•	10GPS 100/LP
101,6	86,1	6,3	0,5		10GPS 101.6/LP
105	89,5	6,3	0,5		10GPS 105
110	94,5	6,3	0,5		10GPS 110
115	94	8,1	0,6		10GPS 115/1
115	99,5	6,3	0,5		10GPS 115
118	102,5	6,3	0,5		10GPS 118/LP
120	104,5	6,3	0,5		10GPS 120
125	104	8,1	0,6		10GPS 125/1/LP
125	109,5	6,3	0,5	•	10GPS 125
127	111,5	6,3	0,5		10GPS 127/LP
130	109	8,1	0,6		10GPS 130/1/LP
130	114,5	6,3	0,5		10GPS 130
135	114	8,1	0,6		10GPS 135/LP
135	119,5	6,3	0,5		10GPS 135/1/LP
140	119	8,1	0,6		10GPS 140



10GPS seal is designed with a seal edge profile. Two external seal edges act as primary seal for pressures from both sides and prevent any build-up of hydrodynamic pressure over the seal profile and the risk of the blow-by effect.

The central sealing and supporting bulge increases the sealing effect.

Sides grooves ensure that the pressure pre-loads the energising element in all work conditions.

Operating conditions see page 8

Pressure	
10GPS	≤ 40 MPa
10GPS.../LP	≤ 25 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Dynamic sealing element ①	
10GPS	PU24, PU25 or PU38
10GPS.../LP	PU09 or Z20
Energising element ②	NBR 70 Sh A

Assembly see pages 54-59

On one-piece pistons

Advantages

Efficient sealing
Excellent abrasion resistance
Easy installation on monobloc pistons
Small sections

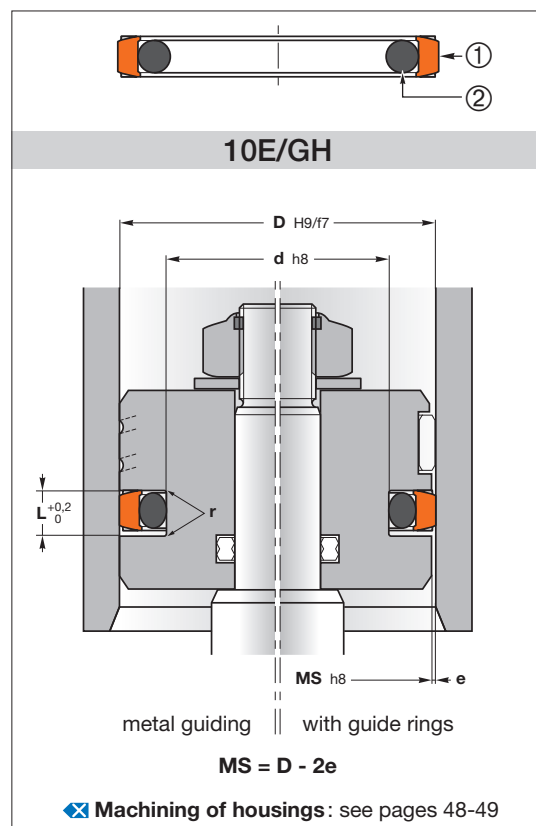
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

L (mm)	e (mm)	
	10GPS	10GPS.../LP
2,2	≤ 0,2	≤ 0,15
3,2	≤ 0,25	≤ 0,2
4,2	≤ 0,25	≤ 0,2
6,3	≤ 0,3	≤ 0,25
8,1	≤ 0,3	≤ 0,25

D	d	L	r	ISO 7451/1	Reference
140	124,5	6,3	0,5		10GPS 140/1
150	129	8,1	0,6		10GPS 150
152,4	131,4	8,1	0,6		10GPS 152.4/LP
160	139	8,1	0,6	•	10GPS 160
170	149	8,1	0,6		10GPS 170
180	159	8,1	0,6		10GPS 180
185	164	8,1	0,6		10GPS 185/LP
190	169	8,1	0,6		10GPS 190
200	179	8,1	0,6	•	10GPS 200
210	189	8,1	0,6		10GPS 210/LP
220	199	8,1	0,6		10GPS 220/LP
220	199	8,1	0,6		10GPS 220
230	209	8,1	0,6		10GPS 230
250	229	8,1	0,6	•	10GPS 250



10E/GH has a dynamic seal element that, due to the special design, improves the pressure distribution and drastically reduces the friction. It is made of a special high resistance polymer.

It increases the performance and service life in applications where properties such as **abrasion resistance** and **tear strength** are critical. Conical shaped notches allow the seal to energise without risk of extrusion of O-ring.

A standard size O-ring with low permanent deformation is the energising component on the static side.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①	TPE
Energising element ②	NBR 70 Sh A

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

- Easy installation on a solid piston
- Returns to the size immediately after assembly
- Low friction and no tendency of stick-slip
- Simple groove design and space-saving construction
- Excellent wear-resistance
- High resistance against extrusion
- Extended service life

Please contact us for applications approaching maximum values.

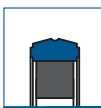
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Pressure	10 MPa	20 MPa	30 MPa	40 MPa
L (mm)	e (mm)			
2,2	0,35	0,23	0,18	0,15
3,2	0,4	0,25	0,2	0,15
4,2	0,4	0,25	0,2	0,18
6,3	0,45	0,28	0,23	0,18
8,1	0,55	0,35	0,25	0,2
> 40 MPa => e = H8/f8				

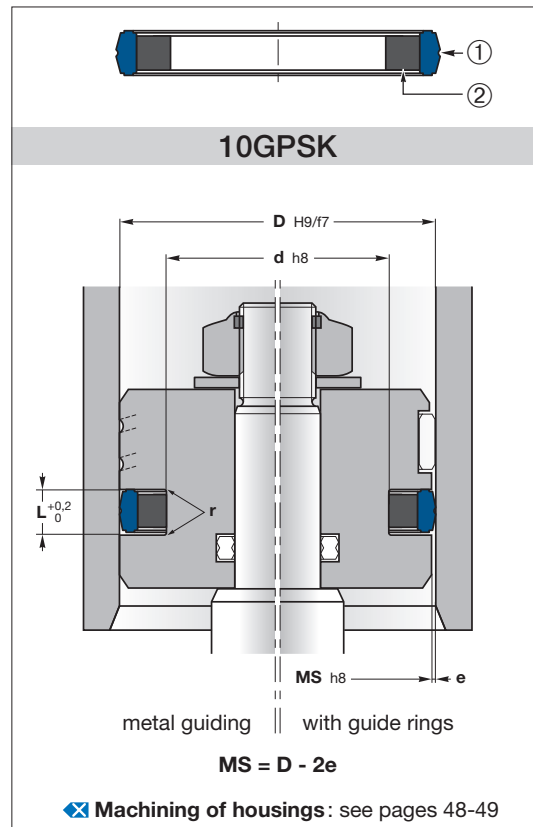
D	d	L	ISO 7425/1	Reference
12	7,1	2,2	•	10E/GH 12
17	12,1	2,2		10E/GH 17
20	12,5	3,2	•	10E/GH 20
25	17,5	3,2	•	10E/GH 25
28	20,5	3,2		10E/GH 28
30	22,5	3,2		10E/GH 30
32	24,5	3,2	•	10E/GH 32
35	27,5	3,2		10E/GH 35
40	29	4,2	•	10E/GH 40/1
	32,5	3,2	•	10E/GH 40
45	34	4,2		10E/GH 45
48	37	4,2		10E/GH 48
50	34,5	6,3	•	10E/GH 50/1
	39	4,2	•	10E/GH 50

D	d	L	ISO 7425/1	Reference
55	44	4,2		10E/GH 55
60	44,5	6,3		10E/GH 60/1
	49	4,2		10E/GH 60
63	47,5	6,3	•	10E/GH 63/1
	52	4,2	•	10E/GH 63
65	49,5	6,3		10E/GH 65
	52,0	6,3		10E/GH 65/1
70	59	4,2		10E/GH 70
75	64	4,2		10E/GH 75
80	64,5	6,3	•	10E/GH 80
90	74,5	6,3		10E/GH 90
95	79,5	6,3		10E/GH 95
100	84,5	6,3	•	10E/GH 100
140	127,6	5,5		10E/GH 140



10GPSK

PU double acting piston seal



Pressure	16 MPa	25 MPa	32 MPa	40 MPa
L (mm)	e (mm)			
4,2	≤ 0,4	≤ 0,3	≤ 0,2	
6,3	≤ 0,5	≤ 0,4	≤ 0,3	≤ 0,25
8,1	≤ 0,6	≤ 0,5	≤ 0,4	≤ 0,35

10GPSK is a two-piece compact seal consisting of one profile ring with pronounced sealing edge and one energising element for producing the pre-load.

Sides grooves ensure that the pressure pre-loads the energising element in all work conditions.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Sealing element ① / Energising element ②	
	PU25 / NBR3473
	PU35 / NBR1680
	PU38 / NBR8480

Assembly see pages 54-59

On one-piece pistons

Advantages

- Efficient sealing
- Excellent abrasion resistance
- Easy installation on monobloc pistons
- Small sections

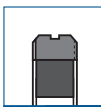
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

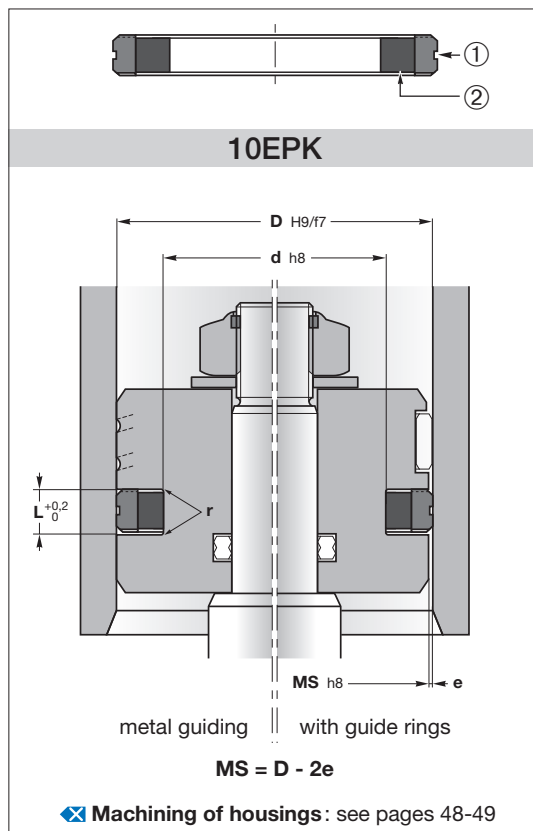
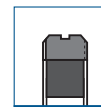
D	d	L	r	ISO 7425/1	Reference
20	12,5	3,2	0,2	•	10GPSK 20
25	17,5	3,2	0,2	•	10GPSK 25
30	22,5	3,2	0,2		10GPSK 30
32	24,5	3,2	0,2	•	10GPSK 32
40	24,5	6,3	0,4	•	10GPSK 40
	29	4,2	0,3	•	10GPSK 40/1
45	34	4,2	0,3		10GPSK 45/1
50	34,5	6,3	0,4	•	10GPSK 50
	39	4,2	0,3	•	10GPSK 50/1
55	39,5	6,3	0,4		10GPSK 55
	44	4,2	0,3		10GPSK 55/1
60	44,5	6,3	0,4		10GPSK 60
	49	4,2	0,3		10GPSK 60/1
63	47,5	6,3	0,4	•	10GPSK 63
	52	4,2	0,3	•	10GPSK 63/1
65	49,5	6,3	0,4		10GPSK 65
	52	6,3	0,4		10GPSK 65/1
	54	4,2	0,3		10GPSK 65/2
70	54,5	6,3	0,4		10GPSK 70
	57	6,3	0,4		10GPSK 70/2
	59	4,2	0,3		10GPSK 70/1
75	59,5	6,3	0,4		10GPSK 75
80	59	8,1	0,4		10GPSK 80/1
	59	10,5	0,4		10GPSK 80/2
	64,5	6,3	0,4	•	10GPSK 80

D	d	L	r	ISO 7425/1	Reference
85	69,5	6,3	0,4		10GPSK 85
	71,5	6,3	0,4		10GPSK 85/1
90	69	8,1	0,4		10GPSK 90/1
	74,5	6,3	0,4		10GPSK 90
	69	10,5	0,4		10GPSK 90/2
95	79,5	6,3	0,4		10GPSK 95
100	79	8,1	0,4		10GPSK 100/1
	84,5	6,3	0,4	•	10GPSK 100
105	89,5	6,3	0,4		10GPSK 105
110	89	8,1	0,4		10GPSK 110/1
	89	10,5	0,4		10GPSK 110/2
	94,5	6,3	0,4		10GPSK 110
115	94	8,1	0,4		10GPSK 115/1
120	99	8,1	0,4		10GPSK 120/1
	99	10,5	0,4		10GPSK 120/2
	104,5	6,3	0,4		10GPSK 120
125	104	8,1	0,4	•	10GPSK 125/1
	104	10,5	0,4		10GPSK 125/2
	109,5	6,3	0,4	•	10GPSK 125
130	109	8,1	0,4		10GPSK 130/1
140	119	8,1	0,4		10GPSK 140
	119	10,5	0,4		10GPSK 140/1
150	129	8,1	0,4		10GPSK 150/1
	129	10,5	0,4		10GPSK 150
160	139	8,1	0,4	•	10GPSK 160
180	159	8,1	0,4		10GPSK 180
200	175	12,5	0,4		10GPSK 200
	179	8,1	0,4	•	10GPSK 200/1



10EPK

PU double acting piston seal



10EPK seal piston ring was developed specifically to be totally interchangeable with the PTFE piston rings. It's a product which can be more readily installed on the pistons and provide longer field service life.

The dynamic surface of the piston ring is **impregnated with molybdenum disulfide** (MoS₂) to reduce the friction.

Radial notches on both sides of the seal ensure a fast **energising** of the sealing element.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Dynamic sealing element ①	PU29 + MoS ₂
Energising element ②	NBR1970

Assembly see pages 54-59

On one-piece pistons

Advantages

- Small sections
- High extrusion resistance
- Easy installation on monobloc pistons
- Excellent abrasion resistance and long service life
- Low break-out and running friction

Please contact us for applications approaching maximum values.

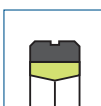
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Pressure	16 MPa	25 MPa	32 MPa	40 MPa
L (mm)	e (mm)			
3,2	≤ 0,3	≤ 0,2		
4,2	≤ 0,4	≤ 0,3	≤ 0,2	
6,3	≤ 0,5	≤ 0,4	≤ 0,3	≤ 0,25
8,1	≤ 0,6	≤ 0,5	≤ 0,4	≤ 0,35

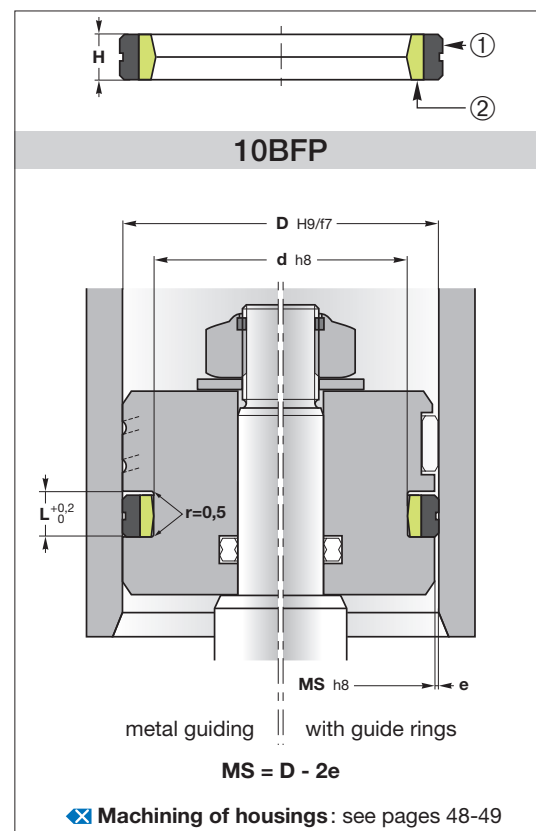
D	d	L	r	ISO 7425/1	Reference
25	17,5	3,2	0,2	•	10EPK 25
32	24,5	3,2	0,2	•	10EPK 32
40	29	4,2	0,3	•	10EPK 40
45	34	4,2	0,3		10EPK 45
50	39	4,2	0,3	•	10EPK 50
	34,5	6,3	0,4	•	10EPK 50/1
	37	6,3	0,4		10EPK 50/2
55	44	4,2	0,3		10EPK 55
60	49	4,2	0,3		10EPK 60
	44,5	6,3	0,4		10EPK 60/1
63	52	4,2	0,3	•	10EPK 63
	50	6,3	0,4		10EPK 63/2
65	54	4,2	0,3		10EPK 65
70	59	4,2	0,3		10EPK 70
	54,5	6,3	0,4		10EPK 70/1
	57	6,3	0,4		10EPK 70/2
75	64	4,2	0,3		10EPK 75
80	64,5	6,3	0,4	•	10EPK 80
85	69,5	6,3	0,4		10EPK 85
90	74,5	6,3	0,4		10EPK 90
95	79,5	6,3	0,4		10EPK 95
100	84,5	6,3	0,4	•	10EPK 100
	79	8,1	0,4		10EPK 100/1

D	d	L	r	ISO 7425/1	Reference
105	89,5	6,3	0,4		10EPK 105
110	94,5	6,3	0,4		10EPK 110
115	99,5	6,3	0,4		10EPK 115
120	104,5	6,3	0,4		10EPK 120
125	109,5	6,3	0,4	•	10EPK 125
130	114,5	6,3	0,4		10EPK 130
	109	8,1	0,4		10EPK 130/1
135	114	8,1	0,4		10EPK 135
140	119	8,1	0,4		10EPK 140
145	124	8,1	0,4		10EPK 145
150	129	8,1	0,4		10EPK 150
155	134	8,1	0,4		10EPK 155
160	139	8,1	0,4	•	10EPK 160
	144,5	6,3	0,4		10EPK 160/1
170	149	8,1	0,4		10EPK 170
180	159	8,1	0,4		10EPK 180
190	169	8,1	0,4		10EPK 190
200	179	8,1	0,4	•	10EPK 200
220	199	8,1	0,4		10EPK 220
250	229	8,1	0,4	•	10EPK 250
280	259	8,1	0,4		10EPK 280
320	299	8,1	0,4		10EPK 320



10BFP

PU double acting piston seal



Pressure	16 MPa	25 MPa	32 MPa	40 MPa
L (mm)	e (mm)			
6,8	≤ 0,5	≤ 0,25	≤ 0,2	≤ 0,15
11,1	≤ 0,6	≤ 0,3	≤ 0,25	≤ 0,2

10BFP is a one piece double acting piston seal. It consists of a dynamic sealing and wear lamina bonded to a static sealing and activation lamina. The material used for the static lamina has a high resilience and extremely low compression set. It functions as a seal energizing spring element and assures positive sealing performance throughout a broad pressure range. The dynamic sealing element is made of a harder material, selected for its high abrasion resistant qualities.

The dynamic surface of the piston ring is **impregnated with molybdenum disulfide (MoS₂)** to reduce the friction. **10BFP** can readily be substituted in existing cavities to replace other types of double acting seals. It can easily be installed on one piece pistons and allowed larger tolerances and poorer surface finishes.

Operating conditions

⚙️ see page 8

Pressure	≤ 40 MPa
Temperature	-40°C to 90°C
Speed	≤ 1 m/s
Fluids	⚙️ see pages 22-45

Materials

⚙️ see pages 10-19

Dynamic sealing element ①	PU27 black (95 Sh A)
Energising element ②	PU28 yellow (57 Sh A)

Assembly

⚙️ see pages 54-59

On one-piece pistons

Advantages

- Seal is in one piece
- Small sections
- High extrusion resistance
- Easy installation on monobloc pistons
- Excellent abrasion resistance and long service life
- Low break-out and running friction

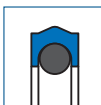
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

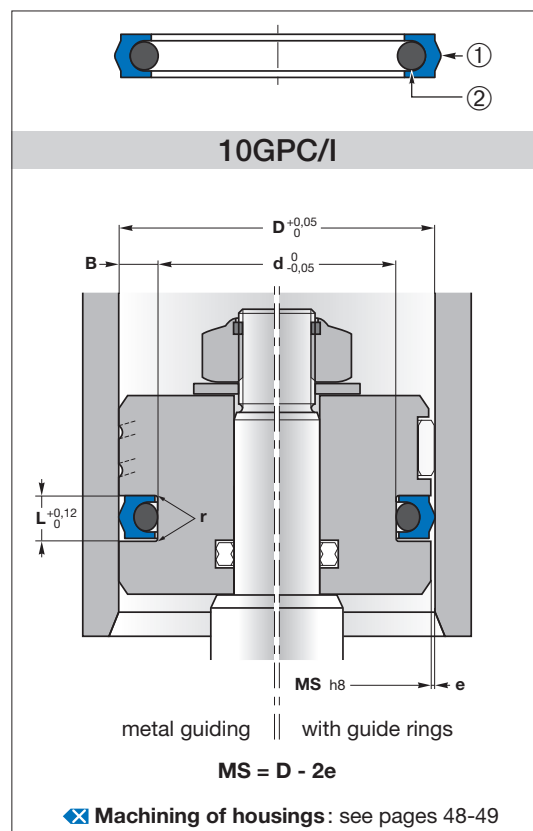
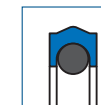
D	d	L	H	Reference
25	20	6,8	6,5	10BFP 2520
30	25	6,8	6,5	10BFP 3025
32	27	6,8	6,5	10BFP 3227
35	30	6,8	6,5	10BFP 3530
40	35	6,8	6,5	10BFP 4035
45	40	6,8	6,5	10BFP 4540
50	45	6,8	6,5	10BFP 5045
55	50	6,8	6,5	10BFP 5550
60	55	6,8	6,5	10BFP 6055
63	53	11,1	10,5	10BFP 6353
	58	6,8	6,5	10BFP 6358
65	60	6,8	6,5	10BFP 6560
70	60	11,1	10,5	10BFP 7060
	65	6,8	6,5	10BFP 7065
75	65	11,1	10,5	10BFP 7565
	70	6,8	6,5	10BFP 7570
80	70	11,1	10,5	10BFP 8070
	75	6,8	6,5	10BFP 8075
85	75	11,1	10,5	10BFP 8575
	80	6,8	6,5	10BFP 8580
90	80	11,1	10,5	10BFP 9080
	85	6,8	6,5	10BFP 9085
95	85	11,1	10,5	10BFP 9585
	90	6,8	6,5	10BFP 9590
100	90	11,1	10,5	10BFP 10090
	95	6,8	6,5	10BFP 10095

D	d	L	H	Reference
105	95	11,1	10,5	10BFP 10595
110	100	11,1	10,5	10BFP 110100
115	105	11,1	10,5	10BFP 115105
120	110	11,1	10,5	10BFP 120110
125	115	11,1	10,5	10BFP 125115
130	120	11,1	10,5	10BFP 130120
135	125	11,1	10,5	10BFP 135125
140	130	11,1	10,5	10BFP 140130
145	135	11,1	10,5	10BFP 145135
150	140	11,1	10,5	10BFP 150140
160	150	11,1	10,5	10BFP 160150
165	155	11,1	10,5	10BFP 165155
170	160	11,1	10,5	10BFP 170160
175	165	11,1	10,5	10BFP 175165
180	170	11,1	10,5	10BFP 180170
190	180	11,1	10,5	10BFP 190180
200	190	11,1	10,5	10BFP 200190
210	200	11,1	10,5	10BFP 210200
220	210	11,1	10,5	10BFP 220210
225	215	11,1	10,5	10BFP 225215
230	220	11,1	10,5	10BFP 230220



10GPC/I

PU double acting piston seal



10GPC/I seals are inch sized, double-acting piston seals with a polyurethane slide ring and a nitrile rubber O-ring energizer. Notches in the slide ring edges enable rapid pressurization of the seal to react quickly to changes in pressure and direction. These profiles can usually be installed without special equipment.

Operating conditions [see page 8](#)

Pressure	≤ 34 MPa
Temperature	-30°C to 110°C
Speed	≤ 1 m/s
Fluids	see pages 22-45

Materials [see pages 10-19](#)

Dynamic sealing element ①	PU
Energising element ②	NBR

Assembly [see pages 54-59](#)

On one-piece pistons

Advantages

- Cost-effective sealing solution
- Suitable for light to medium duty applications
- Available in inch sizes
- Fit O-ring dash-number seal housings
- Small sections
- High extrusion resistance
- Easy installation on monobloc pistons without tools

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

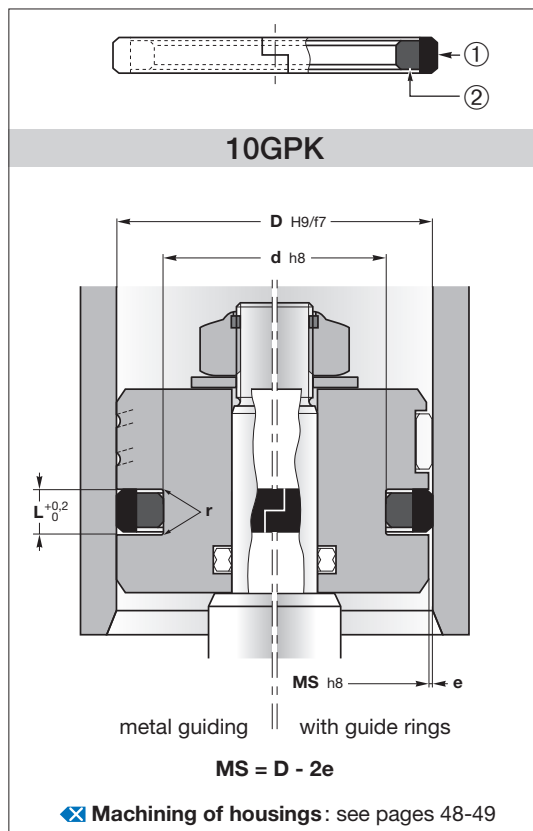
Pressure	0-16 MPa	17-25 MPa	26-34 MPa
B (mm)	e (mm)		
3,1	≤ 0,2	≤ 0,15	-
4,7	≤ 0,3	≤ 0,2	≤ 0,1
6	≤ 0,35	≤ 0,25	≤ 0,15

D	d	L	r	Reference
38,1	31,75	4,75	0,5	10GPC/I 1500
50,8	41,27	7,11	0,6	10GPC/I 2000
63,5	53,97	7,11	0,6	10GPC/I 2500
69,85	60,32	7,11	0,6	10GPC/I 2750
76,2	66,67	7,11	0,6	10GPC/I 3000
82,55	73,02	7,11	0,6	10GPC/I 3250
88,9	79,37	7,11	0,6	10GPC/I 3500
101,6	92,07	7,11	0,6	10GPC/I 4000
114,3	104,77	7,11	0,6	10GPC/I 4500
127	117,47	7,11	0,6	10GPC/I 5000
152,4	139,7	9,52	0,8	10GPC/I 6000



10GPK

Heavy duty piston seal Z-cutted



10GPK double acting piston seal is designed for heavy duty applications.

It's easily assembled thanks to the Z-cutted sealing ring. The **10GPK** has very high extrusion resistance and bigger extrusion gaps are possible compared with PTFE rings.

Operating conditions see page 8

Pressure	≤ 80 MPa
Temperature	-30°C to 100°C
Speed	≤ 1 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Dynamic sealing element ①	PA + glass fibers
Energising element ②	NBR

Assembly see pages 54-59

On one-piece pistons

Advantages

- Small sections
- Very high extrusion resistance
- Easy installation on monobloc pistons without tools
- Excellent abrasion resistance and long service life
- Low break-out and running friction
- Resistent against shock loads

Please contact us for applications approaching maximum values.

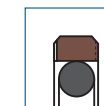
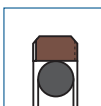
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Pressure	0-20 MPa	20-50 MPa	50-80 MPa
L (mm)	e (mm)		H8/f7
4,2	≤ 0,5	≤ 0,35	
6,3	≤ 0,7	≤ 0,5	
8,1	≤ 0,8	≤ 0,6	

D	d	L	r	ISO 7425/1	Reference
40	29	4,2	0,3	•	10GPK 40
45	34	4,2	0,3		10GPK 45
50	39	4,2	0,3	•	10GPK 50
	34,5	6,3	0,4	•	10GPK 50/1
60	49	4,2	0,3		10GPK 60
63	47,5	6,3	0,4	•	10GPK 63
	52	4,2	0,3	•	10GPK 63/1
70	54,5	6,3	0,4		10GPK 70/1
	59	4,2	0,3		10GPK 70
75	54	8,1	0,4		10GPK 75/2
	59	4,2	0,3		10GPK 70
80	59	8,1	0,4		10GPK 80/1
	64,5	6,3	0,4	•	10GPK 80
	69	4,2	0,3	•	10GPK 80/2
90	69	8,1	0,4		10GPK 90/1
	74,5	6,3	0,4		10GPK 90
95	74	8,1	0,4		10GPK 95/1
100	79	8,1	0,4		10GPK 100/1
	84,5	6,3	0,4	•	10GPK 100
	89	4,2	0,3		10GPK 100/2
105	84	8,1	0,4		10GPK 105/1
110	89	8,1	0,4		10GPK 110/1
	94,5	6,3	0,4		10GPK 110
115	94	8,1	0,4		10GPK 115/1
120	99	8,1	0,4		10GPK 120/1
	104,5	6,3	0,4		10GPK 120
	109	4,2	0,3		10GPK 120/2
125	104	8,1	0,4	•	10GPK 125/1
	109,5	6,3	0,4	•	10GPK 125
	114	4,2	0,3		10GPK 125/2
127	112,7	7,14	0,4		10GPK 127

D	d	L	r	ISO 7425/1	Reference
130	109	8,1	0,4		10GPK 130/1
	114,5	6,3	0,4		10GPK 130
135	114	8,1	0,4		10GPK 135
140	119	8,1	0,4		10GPK 140
	129	4,2	0,3		10GPK 140/2
145	124	8,1	0,4		10GPK 145
150	129	8,1	0,4		10GPK 150
	130,12	9,6	0,4		10GPK 150/1
160	139	8,1	0,4	•	10GPK 160
	140,12	9,6	0,4		10GPK 160/1
165	144	8,1	0,4		10GPK 165
170	149	8,1	0,4		10GPK 170
	150,12	9,6	0,4		10GPK 170/1
175	154	8,1	0,4		10GPK 175
180	159	8,1	0,4		10GPK 180
190	169	8,1	0,4		10GPK 190
200	179	8,1	0,4	•	10GPK 200
210	189	8,1	0,4		10GPK 210
215	194	8,1	0,4		10GPK 215
220	199	8,1	0,4		10GPK 220
225	204	8,1	0,4		10GPK 225
230	209	8,1	0,4		10GPK 230
240	219	8,1	0,4		10GPK 240
250	229	8,1	0,4	•	10GPK 250
260	239	8,1	0,4		10GPK 260
280	255,5	8,1	0,4		10GPK 280
320	292	9,5	0,4	•	10GPK 320



10E/GR-L: Light series 10E/GR-P: Heavy series					
D	d	L	O-ring NBR 70 Sh A	Alternative reference	Reference
10	5,1	2,2	4,76 x 1,78		10E/GR 0100A-55/4470
12	7,1	2,2	6,75 x 1,78		10E/GR 0120A-55/4470
13	8,1	2,2	7,94 x 1,78		10E/GR 0130A-55/4470
14	9,1	2,2	8,73 x 1,78		10E/GR 0140A-55/4470
15	7,5	3,2	7,59 x 2,62		10E/GR 0150A-55/4470
	10,1	2,2	9,52 x 1,78		10E/GR-L 0150A-55/4470
16	8,5	3,2	7,59 x 2,62		10E/GR 0160A-55/4470
18	10,5	3,2	9,19 x 2,62		10E/GR 0180A-55/4470
20	12,5	3,2	12,37 x 2,62		10E/GR 0200A-55/4470
	15,1	2,2	14 x 1,78		10E/GR-L 0200A-55/4470
22	14,5	3,2	13,94 x 2,62		10E/GR 0220A-55/4470
24	16,5	3,2	15,54 x 2,62		10E/GR 0240A-55/4470
25	14	4,2	13,87 x 3,53	15E/GR 0250A	10E/GR-P 0250A-55/4470
	17,5	3,2	17,12 x 2,62		10E/GR 0250A-55/4470
	20,1	2,2	18,77 x 1,78		10E/GR-L 0250A-55/4470
28	20,5	3,2	20,3 x 2,62		10E/GR 0280A-55/4470
30	22,5	3,2	21,89 x 2,62	15E/GR 0300A	10E/GR 0300A-55/4470
32	21	4,2	20,22 x 3,53	15E/GR 0320A	10E/GR-P 0320A-55/4470
	24,5	3,2	23,47 x 2,62		10E/GR 0320A-55/4470
	27,1	2,2	26,7 x 1,78		10E/GR-L 0320A-55/4470
35	27,5	3,2	26,64 x 2,62	15E/GR 0350A	10E/GR 0350A-55/4470
36	28,5	3,2	28,24 x 2,62	15E/GR 0360A	10E/GR 0360A-55/4470
38	30,5	3,2	29,82 x 2,62		10E/GR 0380A-55/4470
40	24,5	6,3	23,16 x 5,34	15E/GR 0400A	10E/GR-P 0400A-55/4470
	29	4,2	28,17 x 3,53		10E/GR 0400A-55/4470
	32,5	3,2	31,42 x 2,62		10E/GR-L 0400A-55/4470
42	31	4,2	29,74 x 3,53		10E/GR 0420A-55/4470
44	33	4,2	31,34 x 3,53		10E/GR 0440A-55/4470
45	34	4,2	32,92 x 3,53	15E/GR 0450A	10E/GR 0450A-55/4470
48	37	4,2	36,09 x 3,53		10E/GR 0480A-55/4470

10E/GR...A piston seal is a bi-directional piston seal for use in low to medium duty hydraulic systems.

The dynamic seal element offers exceptional low friction, high speed performances and high chemical compatibility. Side grooves ensure that pressure loads the energising component in all work conditions.

The seal is **commonly used** in applications such as mobile hydraulics, machine tools, injection moulding machines and hydraulic presses.

Radial notches on both sides of the seal ensure a fast **energising** of the sealing element.

Operating conditions see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Dynamic sealing element ①	
10E/GR...A	PT55
10E/GR...A	PT15
15E/GR...A	PT53
Energising element ②	NBR 70 Sh A

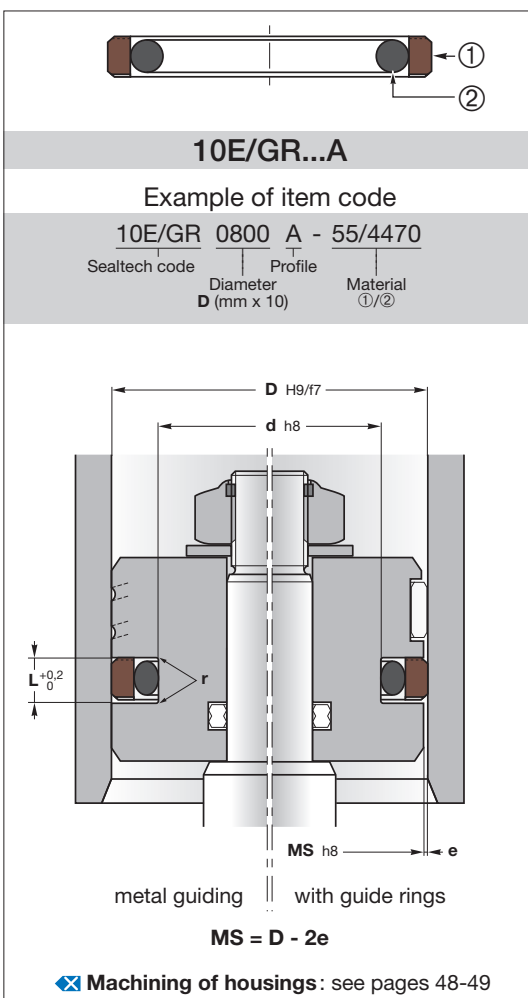
Assembly see pages 54-59

On one-piece pistons

Advantages

Small sections and simple groove design
High extrusion resistance and long service life
Low break-out and running friction
Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
No stick-slip

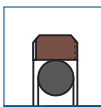
Please contact us for applications approaching maximum values.



More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D (mm)			r (mm)	L (mm)	d (mm)	e (mm)				O-ring ②
10E/GR Standard serie	10E/GR-L Light serie	10E/GR-P Heavy serie				0-10 MPa	10-20 MPa	20-40 MPa	40-50 MPa	
8 → 14,9	15 → 39,9		0,4	2,2	D - 4,9	≤ 0,3	≤ 0,2	≤ 0,15		1,78
15 → 39,9	40 → 79,9		0,6	3,2	D - 7,5	≤ 0,4	≤ 0,25	≤ 0,15		2,62
40 → 79,9	80 → 132,9	15 → 39,9	1	4,2	D - 11	≤ 0,4	≤ 0,25	≤ 0,2		3,53
80 → 132,9	133 → 329,9	40 → 79,9	1,3	6,3	D - 15,5	≤ 0,5	≤ 0,3	≤ 0,2		5,34
133 → 329,9	330 → 669,9	80 → 132,9	1,8	8,1	D - 21	≤ 0,6	≤ 0,35	≤ 0,25		7
330 → 669,9	670 → 999,9	133 → 329,9	1,8	8,1	D - 24,5	≤ 0,7	≤ 0,5	≤ 0,3		7
670 → 999,9		330 → 669,9	2,5	9,5	D - 28					8,4
≥ 1000			3	13,8	D - 38					12

10E/GR-L: Light serie
10E/GR-P: Heavy serie

D	d	L	O-ring NBR 70 Sh A	Alternative reference	Reference
50	34,5	6,3	34,29 x 5,34	15E/GR 0500A	10E/GR-P 0500A-55/4470
	39	4,2	37,69 x 3,53		10E/GR 0500A-55/4470
	42,5	3,2	40,94 x 2,62		10E/GR-L 0500A-55/4470
52	41	4,2	40,87 x 3,53		10E/GR 0520A-55/4470
55	44	4,2	44,04 x 3,53	15E/GR 0550A	10E/GR 0550A-55/4470
56	45	4,2	44,04 x 3,53		10E/GR 0560A-55/4470
60	44,5	6,3	43,82 x 5,34	15E/GR 0600A	10E/GR-P 0600A-55/4470
	49	4,2	47,22 x 3,53		10E/GR 0600A-55/4470
	52,5	3,2	52,07 x 2,62		10E/GR-L 0600A-55/4470
63	47,5	6,3	46,99 x 5,34	15E/GR 0630A	10E/GR-P 0630A-55/4470
	52	4,2	50,39 x 3,53		10E/GR 0630A-55/4470
	55,5	3,2	53,64 x 2,62		10E/GR-L 0630A-55/4470
65	49,5	6,3	46,99 x 5,34	15E/GR 0650A	10E/GR-P 0650A-55/4470
	54	4,2	53,57 x 3,53		10E/GR 0650A-55/4470
70	54,5	6,3	53,34 x 5,34	15E/GR-P 0700A	10E/GR-P 0700A-55/4470
	59	4,2	56,74 x 3,53	15E/GR 0700A	10E/GR 0700A-55/4470
	62,5	3,2	61,6 x 2,62		10E/GR-L 0700A-55/4470
75	59,5	6,3	56,52 x 5,34	15E/GR 0750A	10E/GR-P 0750A-55/4470
	64	4,2	63,09 x 3,53		10E/GR 0750A-55/4470
	67,5	3,2	66,34 x 2,62		10E/GR-L 0750A-55/4470
80	59	8,1	58 x 7	15E/GR-P 0800A	10E/GR-P 0800A-55/4470
	64,5	6,3	62,87 x 5,34	15E/GR 0800A	10E/GR 0800A-55/4470
	69	4,2	68,26 x 3,53		10E/GR-L 0800A-55/4470
85	69,5	6,3	69,22 x 5,34	15E/GR 0850A	10E/GR 0850A-55/4470
90	69	8,1	68 x 7	15E/GR-P 0900A	10E/GR-P 0900A-55/4470
	74,5	6,3	72,39 x 5,34		10E/GR 0900A-15/4470
	74,5	6,3	72,39 x 5,34	15E/GR 0900A	10E/GR 0900A-55/4470
	79	4,2	78,97 x 3,53		10E/GR-L 0900A-55/4470
95	79,5	6,3	78,74 x 5,34	15E/GR 0950A	10E/GR 0950A-55/4470
100	79	8,1	78 x 7	15E/GR-P 1000A	10E/GR-P 1000A-55/4470
	84,5	6,3	81,92 x 5,34	15E/GR 1000A	10E/GR 1000A-55/4470
	89	4,2	88,49 x 3,53		10E/GR-L 1000A-55/4470
105	84	8,1	82 x 7		10E/GR-P 1050A-55/4470
	89,5	6,3	88,27 x 5,34		10E/GR 1050A-55/4470
110	89	8,1	89 x 7	15E/GR-P 1100A	10E/GR-P 1100A-55/4470
	94,5	6,3	91,44 x 5,34	15E/GR 1100A	10E/GR 1100A-55/4470
	99	4,2	98,02 x 3,53		10E/GR-L 1100A-55/4470

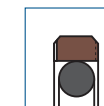
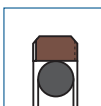
References printed in green are manufactured with a non-standard material

For special requirements (fluid, temperature, pressure, speed...) or applications approaching maximum values, please contact us. Other materials available: **FPM, HNBR, TNBR, EPDM...**10E/GR-L: Light serie
10E/GR-P: Heavy serie

D	d	L	O-ring NBR 70 Sh A	Alternative reference	Reference
115	94	8,1	92 x 7		10E/GR-P 1150A-55/4470
	99,5	6,3	97,79 x 5,34		10E/GR 1150A-55/4470
120	99	8,1	98 x 7	15E/GR-P 1200A	10E/GR-P 1200A-55/4470
	104,5	6,3	104,14 x 5,34	15E/GR 1200A	10E/GR 1200A-55/4470
125	104	8,1	103 x 7	15E/GR-P 1250A	10E/GR-P 1250A-55/4470
	109,5	6,3	107,32 x 5,34		10E/GR 1250A-15/4470
	109,5	6,3	107,32 x 5,34	15E/GR 1250A	10E/GR 1250A-55/4470
130	109	8,1	108 x 7	15E/GR-P 1300A	10E/GR-P 1300A-55/4470
	114,5	6,3	113,67 x 5,34	15E/GR 1300A	10E/GR 1300A-55/4470
135	114	8,1	113,67 x 7		10E/GR 1350A-55/4470
140	119	8,1	116,84 x 7	15E/GR 1400A	10E/GR 1400A-15/4470
	119	8,1	116,84 x 7		10E/GR 1400A-55/4470
145	124	8,1	123,19 x 7		10E/GR 1450A-55/4470
150	129	8,1	126,37 x 7	15E/GR 1500A	10E/GR 1500A-55/4470
155	134	8,1	132,72 x 7		10E/GR 1550A-55/4470
160	139	8,1	135,89 x 7	15E/GR 1600A	10E/GR 1600A-15/4470
	139	8,1	135,89 x 7		10E/GR 1600A-55/4470
165	144	8,1	142,24 x 7		10E/GR 1650A-55/4470
170	149	8,1	145,42 x 7	15E/GR 1700A	10E/GR 1700A-15/4470
	149	8,1	145,42 x 7		10E/GR 1700A-55/4470
175	154	8,1	151,77 x 7		10E/GR 1750A-55/4470
180	159	8,1	158,12 x 7	15E/GR 1800A	10E/GR 1800A-55/4470
	164,5	6,3	164,47 x 5,34		10E/GR-L 1800A-55/4470
190	169	8,1	164,47 x 7		10E/GR 1900A-55/4470
200	179	8,1	177,17 x 7	15E/GR 2000A	10E/GR 2000A-55/4470
210	189	8,1	187,3 x 7		10E/GR 2100A-55/4470
220	199	8,1	196,22 x 7	15E/GR 2200A	10E/GR 2200A-55/4470
225	204	8,1	202,57 x 7		10E/GR 2250A-55/4470
230	209	8,1	208,92 x 7		10E/GR 2300A-55/4470
240	219	8,1	215,27 x 7	15E/GR 2400A	10E/GR 2400A-15/4470
	219	8,1	215,27 x 7		10E/GR 2400A-55/4470

References printed in green are manufactured with a non-standard material

10E/GR...A seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10E/GR-L: Light series 10E/GR-P: Heavy series					
D	d	L	O-ring NBR 70 Sh A	Alternative reference	Reference
250	229	8,1	227,97 x 7		10E/GR 2500A-55/4470
260	239	8,1	234,32 x 7		10E/GR 2600A-55/4470
270	249	8,1	247 x 7		10E/GR 2700A-55/4470
280	259	8,1	253,37 x 7		10E/GR 2800A-55/4470
290	269	8,1	266,07 x 7		10E/GR 2900A-55/4470
295	274	8,1	272,4 x 7		10E/GR 2950A-55/4470
300	279	8,1	278,77 x 7		10E/GR 3000A-55/4470
310	289	8,1	285,1 x 7		10E/GR 3100A-55/4470
320	299	8,1	297,8 x 7		10E/GR 3200A-55/4470
330	305,5	8,1	304,17 x 7		10E/GR 3300A-55/4470
340	315,5	8,1	310,5 x 7		10E/GR 3400A-55/4470
350	325,5	8,1	316,87 x 7		10E/GR 3500A-55/4470
360	335,5	8,1	329,57 x 7		10E/GR 3600A-15/4470
	335,5	8,1	329,57 x 7		10E/GR 3600A-55/4470
370	345,5	8,1	342,27 x 7		10E/GR 3700A-55/4470
380	355,5	8,1	354,97 x 7		10E/GR 3800A-55/4470
390	365,5	8,1	354,97 x 7		10E/GR 3900A-55/4470
400	375,5	8,1	367,67 x 7		10E/GR 4000A-55/4470
420	395,5	8,1	393,07 x 7		10E/GR 4200A-55/4470
440	415,5	8,1	405,26 x 7		10E/GR 4400A-55/4470
450	425,5	8,1	417,96 x 7		10E/GR 4500A-55/4470
480	455,5	8,1	443,36 x 7		10E/GR 4800A-55/4470
500	475,5	8,1	468,76 x 7		10E/GR 5000A-55/4470
550	525,5	8,1	506,86 x 7		10E/GR 5500A-55/4470
600	575,5	8,1	557,66 x 7		10E/GR 6000A-55/4470

References printed in green are manufactured with a non-standard material

10E/GR...A seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be

10E/GR...A piston seal is a bi-directional piston seal for use in low to medium duty hydraulic systems.

The dynamic seal element offers exceptional low friction, high speed performances and high chemical compatibility. Side grooves ensure that pressure loads the energising component in all work conditions.

The seal is **commonly used** in applications such as mobile hydraulics, machine tools, injection moulding machines and hydraulic presses.

Radial notches on both sides of the seal ensure a fast **energising** of the sealing element.

Operating conditions see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Dynamic sealing element ①	
10E/GR...A	PT55
10E/GR...A	PT15
15E/GR...A	PT53
Energising element ②	NBR 70 Sh A

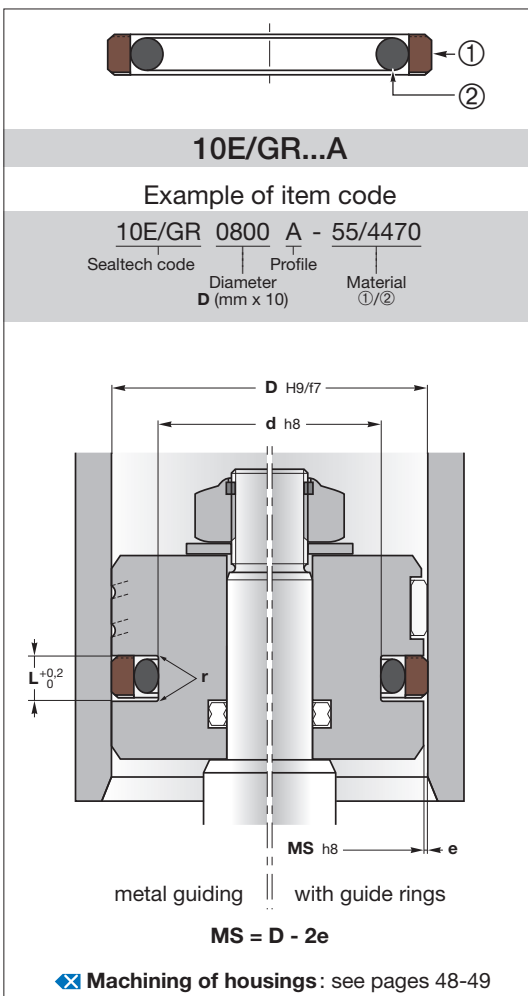
Assembly see pages 54-59

On one-piece pistons

Advantages

Small sections and simple groove design
High extrusion resistance and long service life
Low break-out and running friction
Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
No stick-slip

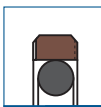
Please contact us for applications approaching maximum values.



More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D (mm)			r (mm)	L (mm)	d (mm)	e (mm)				O-ring ②
10E/GR Standard serie	10E/GR-L Light serie	10E/GR-P Heavy serie				0-10 MPa	10-20 MPa	20-40 MPa	40-50 MPa	
8 → 14,9	15 → 39,9		0,4	2,2	D - 4,9	≤ 0,3	≤ 0,2	≤ 0,15		1,78
15 → 39,9	40 → 79,9		0,6	3,2	D - 7,5	≤ 0,4	≤ 0,25	≤ 0,15		2,62
40 → 79,9	80 → 132,9	15 → 39,9	1	4,2	D - 11	≤ 0,4	≤ 0,25	≤ 0,2		3,53
80 → 132,9	133 → 329,9	40 → 79,9	1,3	6,3	D - 15,5	≤ 0,5	≤ 0,3	≤ 0,2		5,34
133 → 329,9	330 → 669,9	80 → 132,9	1,8	8,1	D - 21	≤ 0,6	≤ 0,35	≤ 0,25		7
330 → 669,9	670 → 999,9	133 → 329,9	1,8	8,1	D - 24,5	≤ 0,7	≤ 0,5	≤ 0,3		7
670 → 999,9		330 → 669,9	2,5	9,5	D - 28					8,4
≥ 1000			3	13,8	D - 38					12



10E/GR...A

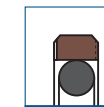
PTFE double acting piston seal

10E/GRINCH...A: Inch dimensions page 539

10E/GR-L: Light serie
10E/GR-P: Heavy serie

D	d	L	O-ring NBR 70 Sh A	Alternative reference	Reference
50	34,5	6,3	34,29 x 5,34	15E/GR 0500A	10E/GR-P 0500A-55/4470
	39	4,2	37,69 x 3,53		10E/GR 0500A-55/4470
	42,5	3,2	40,94 x 2,62		10E/GR-L 0500A-55/4470
52	41	4,2	40,87 x 3,53		10E/GR 0520A-55/4470
55	44	4,2	44,04 x 3,53	15E/GR 0550A	10E/GR 0550A-55/4470
56	45	4,2	44,04 x 3,53		10E/GR 0560A-55/4470
60	44,5	6,3	43,82 x 5,34	15E/GR 0600A	10E/GR-P 0600A-55/4470
	49	4,2	47,22 x 3,53		10E/GR 0600A-55/4470
	52,5	3,2	52,07 x 2,62		10E/GR-L 0600A-55/4470
63	47,5	6,3	46,99 x 5,34	15E/GR 0630A	10E/GR-P 0630A-55/4470
	52	4,2	50,39 x 3,53		10E/GR 0630A-55/4470
	55,5	3,2	53,64 x 2,62		10E/GR-L 0630A-55/4470
65	49,5	6,3	46,99 x 5,34	15E/GR 0650A	10E/GR-P 0650A-55/4470
	54	4,2	53,57 x 3,53		10E/GR 0650A-55/4470
70	54,5	6,3	53,34 x 5,34	15E/GR-P 0700A	10E/GR-P 0700A-55/4470
	59	4,2	56,74 x 3,53	15E/GR 0700A	10E/GR 0700A-55/4470
	62,5	3,2	61,6 x 2,62		10E/GR-L 0700A-55/4470
75	59,5	6,3	56,52 x 5,34	15E/GR 0750A	10E/GR-P 0750A-55/4470
	64	4,2	63,09 x 3,53		10E/GR 0750A-55/4470
	67,5	3,2	66,34 x 2,62		10E/GR-L 0750A-55/4470
80	59	8,1	58 x 7	15E/GR-P 0800A	10E/GR-P 0800A-55/4470
	64,5	6,3	62,87 x 5,34	15E/GR 0800A	10E/GR 0800A-55/4470
	69	4,2	68,26 x 3,53		10E/GR-L 0800A-55/4470
85	69,5	6,3	69,22 x 5,34	15E/GR 0850A	10E/GR 0850A-55/4470
90	69	8,1	68 x 7	15E/GR-P 0900A	10E/GR-P 0900A-55/4470
	74,5	6,3	72,39 x 5,34		10E/GR 0900A-15/4470
	74,5	6,3	72,39 x 5,34	15E/GR 0900A	10E/GR 0900A-55/4470
	79	4,2	78,97 x 3,53		10E/GR-L 0900A-55/4470
95	79,5	6,3	78,74 x 5,34	15E/GR 0950A	10E/GR 0950A-55/4470
100	79	8,1	78 x 7	15E/GR-P 1000A	10E/GR-P 1000A-55/4470
	84,5	6,3	81,92 x 5,34	15E/GR 1000A	10E/GR 1000A-55/4470
	89	4,2	88,49 x 3,53		10E/GR-L 1000A-55/4470
105	84	8,1	82 x 7		10E/GR-P 1050A-55/4470
	89,5	6,3	88,27 x 5,34		10E/GR 1050A-55/4470
110	89	8,1	89 x 7	15E/GR-P 1100A	10E/GR-P 1100A-55/4470
	94,5	6,3	91,44 x 5,34	15E/GR 1100A	10E/GR 1100A-55/4470
	99	4,2	98,02 x 3,53		10E/GR-L 1100A-55/4470

References printed in green are manufactured with a non-standard material

For special requirements (fluid, temperature, pressure, speed...) or applications approaching maximum values, please contact us. Other materials available: **FPM, HNBR, TNBR, EPDM...****SEALTECH**
Hydraulic Seals Technology

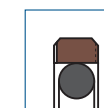
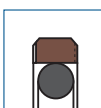
10E/GRINCH...A: Inch dimensions page 539

10E/GR-L: Light serie
10E/GR-P: Heavy serie

D	d	L	O-ring NBR 70 Sh A	Alternative reference	Reference
115	94	8,1	92 x 7		10E/GR-P 1150A-55/4470
	99,5	6,3	97,79 x 5,34		10E/GR 1150A-55/4470
120	99	8,1	98 x 7	15E/GR-P 1200A	10E/GR-P 1200A-55/4470
	104,5	6,3	104,14 x 5,34	15E/GR 1200A	10E/GR 1200A-55/4470
125	104	8,1	103 x 7	15E/GR-P 1250A	10E/GR-P 1250A-55/4470
	109,5	6,3	107,32 x 5,34		10E/GR 1250A-15/4470
	109,5	6,3	107,32 x 5,34	15E/GR 1250A	10E/GR 1250A-55/4470
130	109	8,1	108 x 7	15E/GR-P 1300A	10E/GR-P 1300A-55/4470
	114,5	6,3	113,67 x 5,34	15E/GR 1300A	10E/GR 1300A-55/4470
135	114	8,1	113,67 x 7		10E/GR 1350A-55/4470
140	119	8,1	116,84 x 7	15E/GR 1400A	10E/GR 1400A-15/4470
	119	8,1	116,84 x 7		10E/GR 1400A-55/4470
145	124	8,1	123,19 x 7		10E/GR 1450A-55/4470
150	129	8,1	126,37 x 7	15E/GR 1500A	10E/GR 1500A-55/4470
155	134	8,1	132,72 x 7		10E/GR 1550A-55/4470
160	139	8,1	135,89 x 7	15E/GR 1600A	10E/GR 1600A-15/4470
	139	8,1	135,89 x 7		10E/GR 1600A-55/4470
165	144	8,1	142,24 x 7		10E/GR 1650A-55/4470
170	149	8,1	145,42 x 7		10E/GR 1700A-15/4470
	149	8,1	145,42 x 7		10E/GR 1700A-55/4470
175	154	8,1	151,77 x 7		10E/GR 1750A-55/4470
180	159	8,1	158,12 x 7	15E/GR 1800A	10E/GR 1800A-55/4470
	164,5	6,3	164,47 x 5,34		10E/GR-L 1800A-55/4470
190	169	8,1	164,47 x 7		10E/GR 1900A-55/4470
200	179	8,1	177,17 x 7	15E/GR 2000A	10E/GR 2000A-55/4470
210	189	8,1	187,3 x 7		10E/GR 2100A-55/4470
220	199	8,1	196,22 x 7	15E/GR 2200A	10E/GR 2200A-55/4470
225	204	8,1	202,57 x 7		10E/GR 2250A-55/4470
230	209	8,1	208,92 x 7		10E/GR 2300A-55/4470
240	219	8,1	215,27 x 7		10E/GR 2400A-15/4470
	219	8,1	215,27 x 7		10E/GR 2400A-55/4470

References printed in green are manufactured with a non-standard material

10E/GR...A seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10E/GR-L: Light series 10E/GR-P: Heavy series					
D	d	L	O-ring NBR 70 Sh A	Alternative reference	Reference
250	229	8,1	227,97 x 7		10E/GR 2500A-55/4470
260	239	8,1	234,32 x 7		10E/GR 2600A-55/4470
270	249	8,1	247 x 7		10E/GR 2700A-55/4470
280	259	8,1	253,37 x 7		10E/GR 2800A-55/4470
290	269	8,1	266,07 x 7		10E/GR 2900A-55/4470
295	274	8,1	272,4 x 7		10E/GR 2950A-55/4470
300	279	8,1	278,77 x 7		10E/GR 3000A-55/4470
310	289	8,1	285,1 x 7		10E/GR 3100A-55/4470
320	299	8,1	297,8 x 7		10E/GR 3200A-55/4470
330	305,5	8,1	304,17 x 7		10E/GR 3300A-55/4470
340	315,5	8,1	310,5 x 7		10E/GR 3400A-55/4470
350	325,5	8,1	316,87 x 7		10E/GR 3500A-55/4470
360	335,5	8,1	329,57 x 7		10E/GR 3600A-15/4470
	335,5	8,1	329,57 x 7		10E/GR 3600A-55/4470
370	345,5	8,1	342,27 x 7		10E/GR 3700A-55/4470
380	355,5	8,1	354,97 x 7		10E/GR 3800A-55/4470
390	365,5	8,1	354,97 x 7		10E/GR 3900A-55/4470
400	375,5	8,1	367,67 x 7		10E/GR 4000A-55/4470
420	395,5	8,1	393,07 x 7		10E/GR 4200A-55/4470
440	415,5	8,1	405,26 x 7		10E/GR 4400A-55/4470
450	425,5	8,1	417,96 x 7		10E/GR 4500A-55/4470
480	455,5	8,1	443,36 x 7		10E/GR 4800A-55/4470
500	475,5	8,1	468,76 x 7		10E/GR 5000A-55/4470
550	525,5	8,1	506,86 x 7		10E/GR 5500A-55/4470
600	575,5	8,1	557,66 x 7		10E/GR 6000A-55/4470

References printed in green are manufactured with a non-standard material

10E/GR...A seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be

10E/GR...A piston seal is a bi-directional piston seal for use in low to medium duty hydraulic systems.

The dynamic seal element offers exceptional low friction, high speed performances and high chemical compatibility. Side grooves ensure that pressure loads the energising component in all work conditions.

The seal is **commonly used** in applications such as mobile hydraulics, machine tools, injection moulding machines and hydraulic presses.

Radial notches on both sides of the seal ensure a fast **energising** of the sealing element.

Operating conditions see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Dynamic sealing element ①	
10E/GR...A	PT55
10E/GR...A	PT15
15E/GR...A	PT53
Energising element ②	NBR 70 Sh A

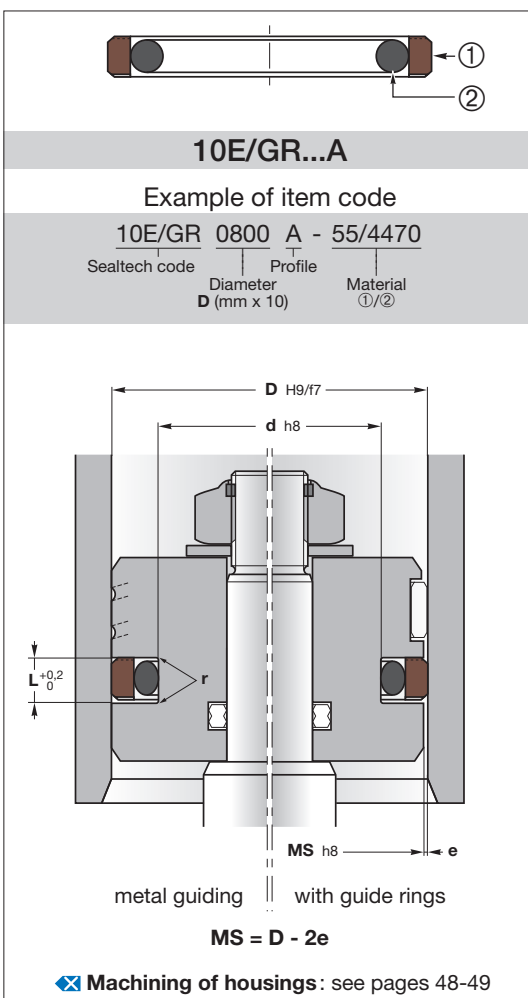
Assembly see pages 54-59

On one-piece pistons

Advantages

Small sections and simple groove design
High extrusion resistance and long service life
Low break-out and running friction
Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
No stick-slip

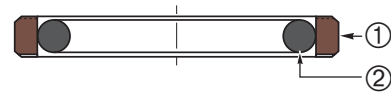
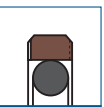
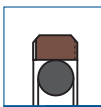
Please contact us for applications approaching maximum values.



More information

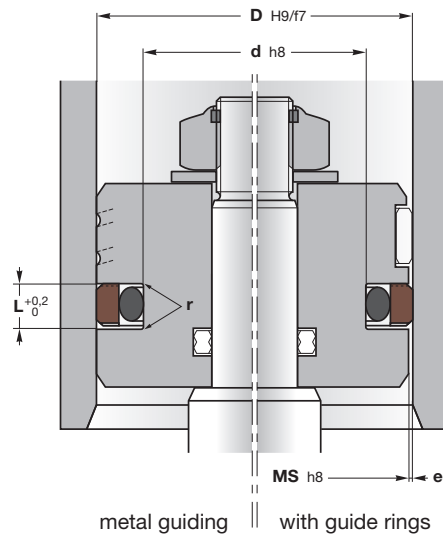
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D (mm)			r (mm)	L (mm)	d (mm)	e (mm)				O-ring ②
10E/GR Standard serie	10E/GR-L Light serie	10E/GR-P Heavy serie				0-10 MPa	10-20 MPa	20-40 MPa	40-50 MPa	
8 → 14,9	15 → 39,9		0,4	2,2	D - 4,9	≤ 0,3	≤ 0,2	≤ 0,15		1,78
15 → 39,9	40 → 79,9		0,6	3,2	D - 7,3	≤ 0,4	≤ 0,25	≤ 0,15		2,62
40 → 79,9	80 → 132,9	15 → 39,9	1	4,2	D - 11	≤ 0,4	≤ 0,25	≤ 0,2		3,53
80 → 132,9	133 → 329,9	40 → 79,9	1,3	6,3	D - 15,5	≤ 0,5	≤ 0,3	≤ 0,2		5,34
133 → 329,9	330 → 669,9	80 → 132,9	1,8	8,1	D - 21	≤ 0,6	≤ 0,35	≤ 0,25		7
330 → 669,9	670 → 999,9	133 → 329,9	1,8	8,1	D - 24,5	≤ 0,7	≤ 0,5	≤ 0,3		7
670 → 999,9		330 → 669,9	2,5	9,5	D - 28					8,4
≥ 1000			3	13,8	D - 38					12

**10E/GRINCH...A**

Example of item code

10E/GRINCH - P 3000 A
Sealtech code Serie Profile
Diameter
D (inch x 1000)



$$MS = D - 2e$$

✕ **Machining of housings:** see pages 48-49

10E/GRINCH...A piston seal is a bi-directional piston seal for use in low to medium duty hydraulic systems.

The dynamic seal element offers exceptional low friction, high speed performances and high chemical compatibility. Side grooves ensure that pressure loads the energising component in all work conditions.

The seal is **commonly used** in applications such as mobile hydraulics, machine tools, injection moulding machines and hydraulic presses.

Radial notches on both sides of the seal ensure a fast **energising** of the sealing element.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①	PT55
Energising element ②	NBR 70 Sh A

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

- Small sections and simple groove design
- High extrusion resistance and long service life
- Low break-out and running friction
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- No stick-slip

Please contact us for applications approaching maximum values.

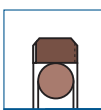
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

10E/GRINCH-L: Light serie
10E/GRINCH-P: Heavy serie

Inch dimensions

D	d	L	O-ring NBR 70 Sh A	Reference
38,1	27,1	4,19	26,57 x 3,53	10E/GRINCH-P 1500A
44,45	33,45	4,19	32,92 x 3,53	10E/GRINCH 1750A
50,8	39,8	4,19	39,7 x 3,53	10E/GRINCH 2000A
57,15	46,15	4,19	46,04 x 3,53	10E/GRINCH 2250A
63,5	52,5	4,19	52,4 x 3,53	10E/GRINCH 2500A
69,85	58,85	4,19	58,74 x 3,53	10E/GRINCH 2750A
	53,35	6,3	53,34 x 5,34	10E/GRINCH-P 2750A
76,2	65,2	4,19	65,1 x 3,53	10E/GRINCH 3000A
	60,7	6,3	59,69 x 5,34	10E/GRINCH-P 3000A
88,9	73,4	6,3	72,39 x 5,34	10E/GRINCH 3500A
	77,9	4,19	75,79 x 3,53	10E/GRINCH-L 3500A
101,6	86,11	6,3	85,09 x 5,34	10E/GRINCH 4000A
	90,6	4,19	88,49 x 3,53	10E/GRINCH-L 4000A
114,3	98,81	6,3	97,79 x 5,34	10E/GRINCH 4500A
127	111,51	6,3	110,49 x 5,34	10E/GRINCH 5000A
139,7	118,69	8,1	116,84 x 7	10E/GRINCH 5500A
152,4	131,39	8,1	129,54 x 7	10E/GRINCH 6000A

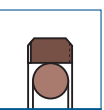


11E/GR...A (FPM)

PTFE double acting piston seal with FPM O-ring



SEALTECH
Hydraulic Seals Technology



11E/GR-L: Light serie 11E/GR-P: Heavy serie

11E/GR...A piston seal is a bi-directional piston seal for use in low to medium duty hydraulic systems.

The dynamic seal element offers exceptional low friction, high speed performances and high chemical compatibility. Side grooves ensure that pressure loads the energising component in all work conditions.

The seal is **commonly used** in applications such as mobile hydraulics, machine tools, injection moulding machines and hydraulic presses.

Radial notches on both sides of the seal ensure a fast **energising** of the sealing element.

Operating conditions

Pressure	≤ 50 MPa
Temperature	-10°C to 200°C
Speed	≤ 15 m/s
Fluids	

Materials

Dynamic sealing element ①	PT55
Energising element ②	FPM 75 Sh A

Assembly

On one-piece pistons

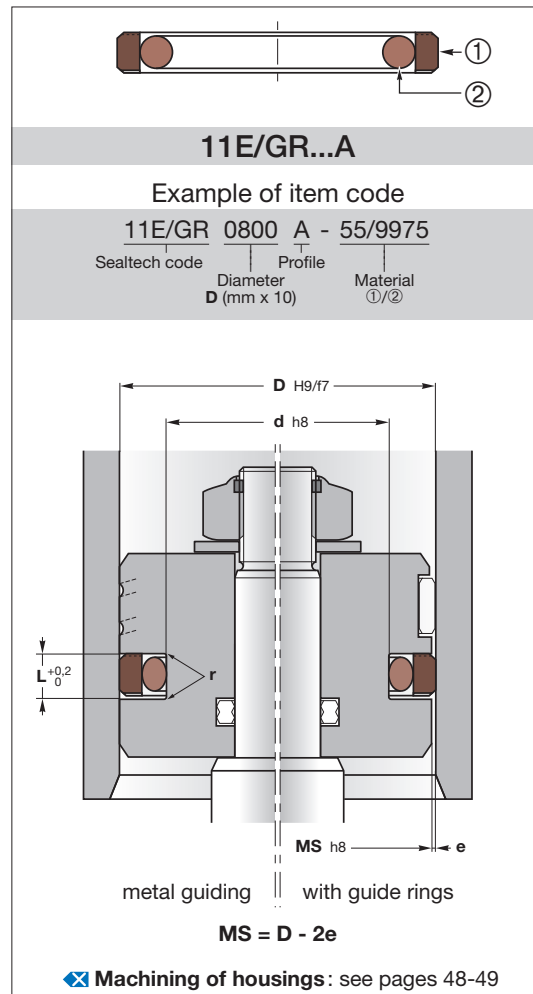
Advantages

- Small sections and simple groove design
- High extrusion resistance and long service life
- Low break-out and running friction
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- No stick-slip
- Large temperature range

Please contact us for applications approaching maximum values.

More information

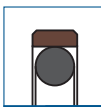
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.



D (mm)			L (mm)	d (mm)	e (mm)				O-ring ②
11E/GR Standard serie	11E/GR-L Light serie	11E/GR-P Heavy serie			0-10 MPa	10-20 MPa	20-40 MPa	40-50 MPa	
8 → 14,9	15 → 39,9		2,2	D - 4,9	≤ 0,3	≤ 0,2	≤ 0,15		1,78
15 → 39,9	40 → 79,9		3,2	D - 7,5	≤ 0,4	≤ 0,25	≤ 0,15		2,62
40 → 79,9	80 → 132,9	15 → 39,9	4,2	D - 11	≤ 0,4	≤ 0,25	≤ 0,2		3,53
80 → 132,9	133 → 329,9	40 → 79,9	6,3	D - 15,5	≤ 0,5	≤ 0,3	≤ 0,2		5,34
133 → 329,9	330 → 669,9	80 → 132,9	8,1	D - 21	≤ 0,6	≤ 0,35	≤ 0,25		7
330 → 669,9	670 → 999,9	133 → 329,9	8,1	D - 24,5	≤ 0,7	≤ 0,5	≤ 0,3		7
670 → 999,9		330 → 669,9	9,5	D - 28					8,4
≥ 1000			13,8	D - 38					12

FPM energising element					
D	d	L	r	O-ring FPM 75 Sh A	Reference
25	17,5	3,2	0,6	17,12 x 2,62	11E/GR 0250A-55/9975
30	22,5	3,2	0,6	21,89 x 2,62	11E/GR 0300A-55/9975
32	24,5	3,2	0,6	23,47 x 2,62	11E/GR 0320A-55/9975
35	27,5	3,2	0,6	26,64 x 2,62	11E/GR 0350A-55/9975
40	29	4,2	1	28,17 x 3,53	11E/GR 0400A-55/9975
45	34	4,2	1	32,92 x 3,53	11E/GR 0450A-55/9975
48	37	4,2	1	36,09 x 3,53	11E/GR 0480A-55/9975
50	39	4,2	1	37,69 x 3,53	11E/GR 0500A-55/9975
52	41	4,2	1	40,87 x 3,53	11E/GR 0520A-55/9975
55	44	4,2	1	44,04 x 3,53	11E/GR 0550A-55/9975
60	49	4,2	1	47,22 x 3,53	11E/GR 0600A-55/9975
63	52	4,2	1	50,39 x 3,53	11E/GR 0630A-55/9975
65	54	4,2	1	53,57 x 3,53	11E/GR 0650A-55/9975
70	59	4,2	1	56,74 x 3,53	11E/GR 0700A-55/9975
75	64	4,2	1	63,09 x 3,53	11E/GR 0750A-55/9975
80	64,5	6,3	1,3	62,87 x 5,34	11E/GR 0800A-55/9975
85	69,5	6,3	1,3	69,22 x 5,34	11E/GR 0850A-55/9975
90	74,5	6,3	1,3	72,39 x 5,34	11E/GR 0900A-55/9975
95	79,5	6,3	1,3	78,74 x 5,34	11E/GR 0950A-55/9975
100	84,5	6,3	1,3	81,92 x 5,34	11E/GR 1000A-55/9975
110	94,5	6,3	1,3	91,44 x 5,34	11E/GR 1100A-55/9975
120	104,5	6,3	1,3	104,14 x 5,34	11E/GR 1200A-55/9975
125	109,5	6,3	1,3	107,32 x 5,34	11E/GR 1250A-55/9975
130	114,5	6,3	1,3	113,67 x 5,34	11E/GR 1300A-55/9975
140	119	8,1	1,8	116,84 x 7	11E/GR 1400A-55/9975
150	129	8,1	1,8	126,37 x 7	11E/GR 1500A-55/9975
160	139	8,1	1,8	135,89 x 7	11E/GR 1600A-55/9975
180	159	8,1	1,8	158,12 x 7	11E/GR 1800A-55/9975
200	179	8,1	1,8	177,17 x 7	11E/GR 2000A-55/9975
220	199	8,1	1,8	196,22 x 7	11E/GR 2200A-55/9975
250	229	8,1	1,8	227,97 x 7	11E/GR 2500A-55/9975

All other dimensions from series 10E/GR, 10E/GR-L and 10E/GR-P are also available with FPM O-rings.



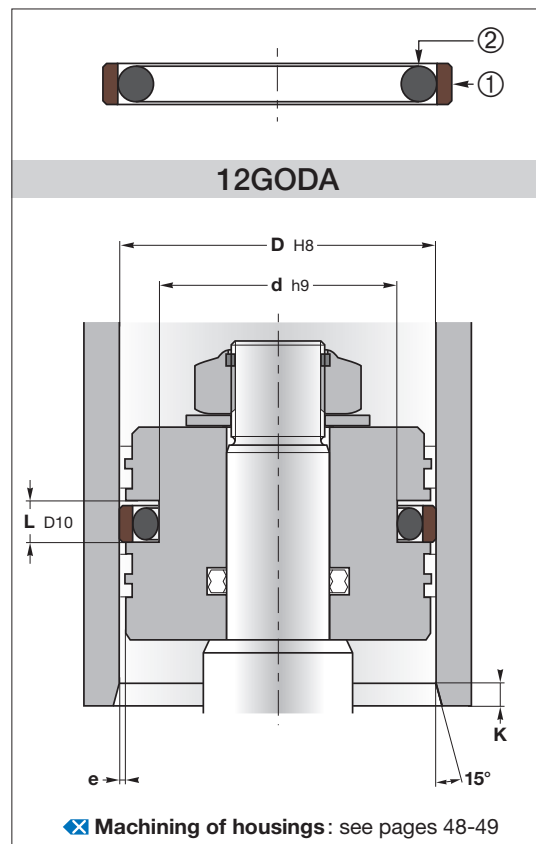
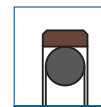
12GODA

PTFE double acting piston seal

HUNGER
Dichtungen



SEALTECH
Hydraulic Seals Technology



The **12GODA** is a compact seal for cylinder pistons. It can be used for simple and light-duty cylinder designs used in medium pressure ranges.

The sealing effect is provided by the slide ring being pressed against the sealing surface by the O-ring energiser at pressure. The surface finish should be Ra 0.1 - 0.3 µm.

Compact design, good sliding properties and low break-away forces are the main features of this doubleacting seal.

Operating conditions see page 8

Pressure	≤ 36 MPa
Temperature	-35°C to 100°C
Speed	≤ 1 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Energising element ①	NBR
Slide ring ②	PTFE-Bronze

Assembly see pages 54-59

On one-piece pistons

Advantages

- Small sections and simple groove design
- High extrusion resistance and long service life
- Low break-out and running friction
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- No stick-slip

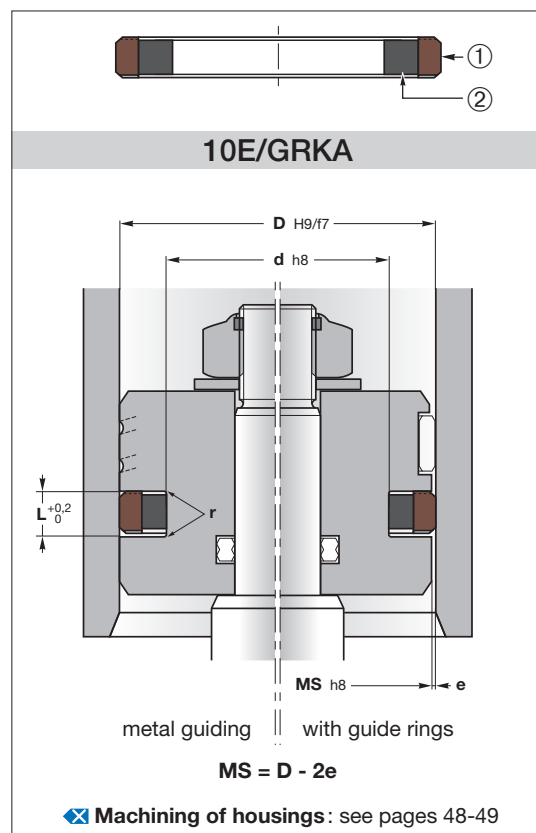
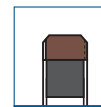
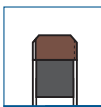
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Standard version rod Ø	Groove Ø	Groove width	Gap size	
			e (mm)	
D (mm)	d (mm)	L (mm)	0 - 20 MPa	20 - 36 MPa
22 - 99	D - 8	4	≤ 0,2	≤ 0,15
100 - 149	D - 12	6	≤ 0,3	≤ 0,2
150 - 499	D - 16	8	≤ 0,4	≤ 0,2
500 - 1000	D - 20	10	0,4 - 0,5	≤ 0,25

D	d	L	K	HUNGER reference	Reference
40	32	4	7	010902	12GODA 040
50	42	4	7	010908	12GODA 050
63	55	4	7	010912	12GODA 063
70	62	4	7	010914	12GODA 070
80	72	4	7	010917	12GODA 080
100	88	6	7	010922	12GODA 100
125	113	6	10	010927	12GODA 125
140	128	6	10	010930	12GODA 140
160	144	8	10	010934	12GODA 160
200	184	8	10	010940	12GODA 200



Pressure	0-10 MPa	10-20 MPa	20-40 MPa	40-50 MPa
L	e (mm)			
3,2	≤ 0,4	≤ 0,25	≤ 0,15	H8/f8
4,2	≤ 0,4	≤ 0,25	≤ 0,2	
6,3	≤ 0,5	≤ 0,3	≤ 0,2	
8,1	≤ 0,6	≤ 0,35	≤ 0,25	

10E/GRKA double acting piston seal consists of a PTFE piston sealing ring and an elastomer square ring as preloading element. The dynamic seal element offers exceptional low friction and high speed performances.

The material combination of the slipper ring (PTFE) and the square ring (elastomer) makes this product suitable for a wide range of applications, especially for aggressive media and/or high temperatures. Side grooves ensure that pressure loads the energising component in all work conditions.

The seal is used in control cylinders, in servo controlled systems, machine tools as **quick acting** cylinders.

Radial notches on both sides of the seal ensure a fast **energising** of the sealing element.

Operating conditions

⚙️ see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	⚙️ see pages 22-45

Materials

⚙️ see pages 10-19

Dynamic sealing element ①	PT55
Energising element ②	NBR1970

Assembly

⚙️ see pages 54-59

On one-piece pistons

Advantages

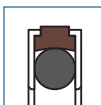
Small sections and simple groove design
 High extrusion resistance and long service life
 Low break-out and running friction
 No stick-slip
 Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of square-ring compounds

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	r	Reference
25	17,5	3,2	0,3	10E/GRKA 25
32	24,5	3,2	0,3	10E/GRKA 32
40	29	4,2	0,3	10E/GRKA 40
45	34	4,2	0,3	10E/GRKA 45
50	39	4,2	0,3	10E/GRKA 50
50	34,5	6,3	0,3	10E/GRKA 50/1
55	44	4,2	0,3	10E/GRKA 55
60	49	4,2	0,3	10E/GRKA 60
60	44,5	6,3	0,3	10E/GRKA 60/1
63	52	4,2	0,3	10E/GRKA 63
65	54	4,2	0,3	10E/GRKA 65
70	59	4,2	0,3	10E/GRKA 70
70	54,5	6,3	0,3	10E/GRKA 70/1
75	64	4,2	0,3	10E/GRKA 75
80	64,5	6,3	0,3	10E/GRKA 80
85	69,5	6,3	0,3	10E/GRKA 85
90	74,5	6,3	0,3	10E/GRKA 90
95	79,5	6,3	0,3	10E/GRKA 95
100	84,5	6,3	0,3	10E/GRKA 100
100	79	8,1	0,4	10E/GRKA 100/1
105	89,5	6,3	0,3	10E/GRKA 105
110	94,5	6,3	0,3	10E/GRKA 110
115	99,5	6,3	0,3	10E/GRKA 115
120	104,5	6,3	0,3	10E/GRKA 120
125	109,5	6,3	0,3	10E/GRKA 125
130	114,5	6,3	0,3	10E/GRKA 130
130	109	8,1	0,4	10E/GRKA 130/1
135	114	8,1	0,4	10E/GRKA 135
140	119	8,1	0,4	10E/GRKA 140
145	124	8,1	0,4	10E/GRKA 145
150	129	8,1	0,4	10E/GRKA 150
155	134	8,1	0,4	10E/GRKA 155
160	139	8,1	0,4	10E/GRKA 160
170	149	8,1	0,4	10E/GRKA 170
180	159	8,1	0,4	10E/GRKA 180
190	169	8,1	0,4	10E/GRKA 190
200	179	8,1	0,4	10E/GRKA 200
220	199	8,1	0,4	10E/GRKA 220
250	229	8,1	0,4	10E/GRKA 250
280	259	8,1	0,4	10E/GRKA 280
320	299	8,1	0,4	10E/GRKA 320



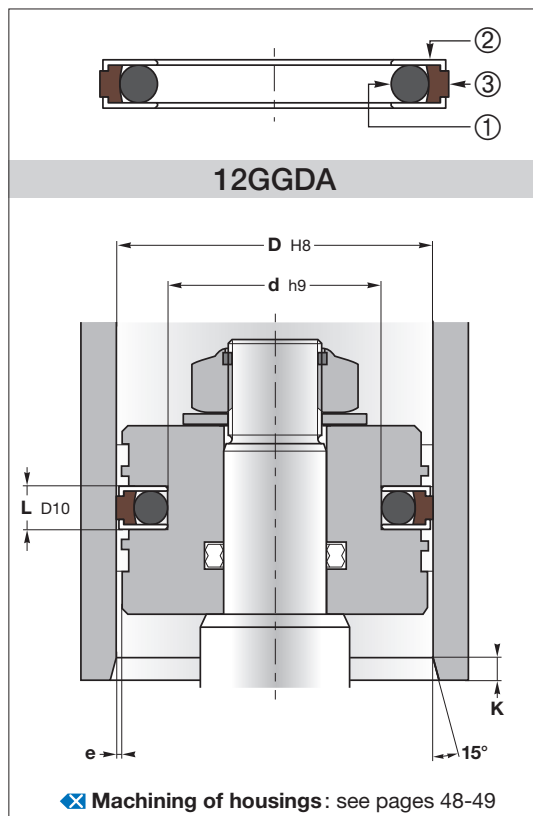
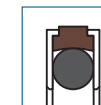
12GGDA

Captive slide composite Seal

HUNGER
Dichtungen



SEALTECH
Hydraulic Seals Technology



The **12GGDA** captive slide composite seal for outside sealing is a compact element for sealing cylinder pistons. It can be used with mineral oils and in modified form with water based fluids, fire resistant fluids, and compressed air.

The **12GGDA** seal consists of 4 parts, a sharp edged sealing ring of PTFE-Bronze-Compound, 2 L-shaped support rings of POM and an O-ring as energiser.

The L-shaped rings firmly support and guide the slide ring to ensure a tight seal at all times. The slide ring provides the sealing function, being pressed against the cylinder wall by the O-ring energiser. Due to its excellent sliding characteristics, measurable wear cannot be detected even after millions of stroke cycles.

When combined with cylinder tube surface finishes of Ra 0.1 -0.3 µm, static coefficients of friction are in the order of 0.05 to 0.07 at pressures up to 30 MPa. At high speeds, this value increases to slightly above 0.1.

This frictional characteristic means that smooth movement can be achieved even at low speeds. There is no stiction, no unacceptable heat generation, and above all no stick-slip effect.

Operating conditions see page 8

Pressure	≤ 45 MPa
Temperature	-35°C to 100°C
Speed	≤ 1 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Energising element ①	NBR
L-ring ②	POM
Slide ring ③	PTFE-Bronze

Assembly see pages 54-59

On one-piece pistons
First insert O-ring and slide ring into the groove then the two split L-rings

Advantages

- Simple groove design
- Small sections
- Extrusion resistance at high pressure
- Excellent abrasion resistance
- Low friction
- No stick-slip

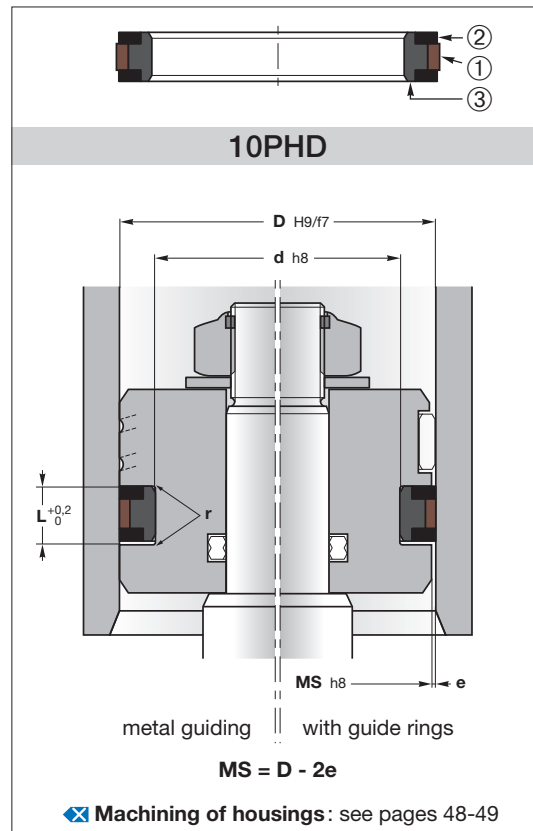
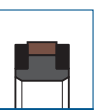
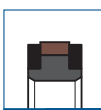
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Standard version rod Ø	Groove Ø	Groove width	Lead-in chamfer	Gap size	
				e (mm)	
D (mm)	d (mm)	L (mm)	K (mm)	10 MPa	45 MPa
< 96	D - 16,8	8	8	0,35	0,25
96 - 190	D - 20	10	10	0,4	0,3
191 - 380	D - 28	13	13	0,5	0,4
381 - 1000	D - 36	20	20	0,8	0,7

D	d	L	HUNGER reference	Reference
40	23,2	8	010702	12GGDA 040
45	28,2	8	010706	12GGDA 045
50	33,2	8	010708	12GGDA 050
56	39,2	8	010710	12GGDA 056
63	46,2	8	010712	12GGDA 063
65	48,2	8	010713	12GGDA 065
70	53,2	8	010714	12GGDA 070
75	58,2	8	010715	12GGDA 075
80	63,2	8	010717	12GGDA 080
85	68,2	8	010718	12GGDA 085
90	73,2	8	010720	12GGDA 090
95	78,2	8	010721	12GGDA 095
100	80	10	010722	12GGDA 100
105	85	10	010723	12GGDA 105
110	90	10	010724	12GGDA 110
115	95	10	010725	12GGDA 115
120	100	10	010726	12GGDA 120
125	105	10	010727	12GGDA 125
130	110	10	010728	12GGDA 130
135	115	10	010729	12GGDA 135
140	120	10	010730	12GGDA 140
145	125	10	010731	12GGDA 145
150	130	10	010732	12GGDA 150
155	135	10	010733	12GGDA 155
160	140	10	010734	12GGDA 160
170	150	10	010735	12GGDA 170
180	160	10	010737	12GGDA 180
190	170	10	010739	12GGDA 190
200	172	13	010740	12GGDA 200
210	182	13	010741	12GGDA 210
220	192	13	010742	12GGDA 220
240	212	13	010745	12GGDA 240
250	222	13	010747	12GGDA 250



10PHD piston seal is a combination of a PTFE sealing element energised by an elastomer profile ring, completed with two back-up rings.

The activated **back-up rings** offer a good protection against extrusion and ensure a long service life.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Speed	≤ 1,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Sealing element ①	PT53
Anti-extrusion rings ②	POM
Energising element ③	NBR3380

Assembly see pages 54-59

On one-piece pistons

Advantages

- Simple groove design
- Small sections
- Extrusion resistance at high pressure
- Excellent abrasion resistance
- Low friction
- No stick-slip

Please contact us for applications approaching maximum values.

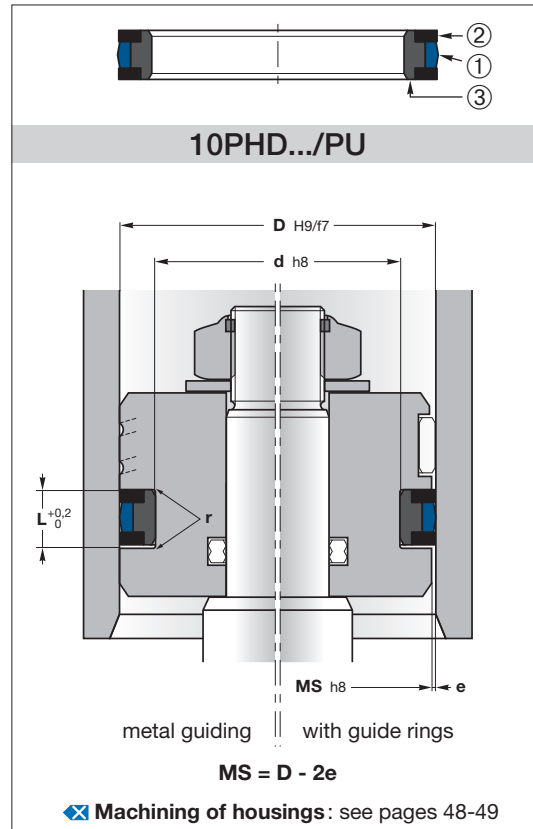
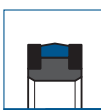
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

0-30 MPa	30-40 MPa
e (mm)	
≤ 0,5	≤ 0,3

D	d	L	r	Reference
40	30	8	0,3	10PHD 4030
45	31	9	0,3	10PHD 4531
50	36	9	0,3	10PHD 5036
50	40	8	0,3	10PHD 5040
55	41	9	0,3	10PHD 5541
60	46	9	0,3	10PHD 6046
60	50	8	0,3	10PHD 6050
63	48	11	0,5	10PHD 6348
63	53	8	0,3	10PHD 6353
65	50	11	0,5	10PHD 6550
70	55	11	0,5	10PHD 7055
70	60	8	0,3	10PHD 7060
75	60	11	0,5	10PHD 7560
80	65	11	0,5	10PHD 8065
80	65	12,5	0,5	10PHD 8065/1
85	70	11	0,5	10PHD 8570
90	75	11	0,5	10PHD 9075
90	75	12,5	0,5	10PHD 9075/1
95	80	11	0,5	10PHD 9580
100	85	12,5	0,5	10PHD 10085
105	88	14	0,5	10PHD 10588
105	90	12,5	0,5	10PHD 10590
110	95	12,5	0,5	10PHD 11095
115	100	12,5	0,5	10PHD 115100
120	105	12,5	0,5	10PHD 120105
125	102	16	0,6	10PHD 125102
125	110	12,5	0,5	10PHD 125110
130	107	16	0,6	10PHD 130107
135	112	16	0,6	10PHD 135112
140	117	16	0,6	10PHD 140117
140	125	12,5	0,5	10PHD 140125
145	122	16	0,6	10PHD 145122
150	127	16	0,6	10PHD 150127

D	d	L	r	Reference
150	135	12,5	0,5	10PHD 150135
155	132	16	0,6	10PHD 155132
160	137	16	0,6	10PHD 160137
160	145	12,5	0,5	10PHD 160145
165	142	16	0,6	10PHD 165142
170	147	16	0,6	10PHD 170147
170	155	12,5	0,6	10PHD 170155
175	152	16	0,6	10PHD 175152
180	157	16	0,6	10PHD 180157
180	165	12,5	0,5	10PHD 180165
185	162	16	0,6	10PHD 185162
190	167	16	0,6	10PHD 190167
195	172	16	0,6	10PHD 195172
200	177	16	0,6	10PHD 200177
200	180	16	0,6	10PHD 200180
210	187	16	0,6	10PHD 210187
220	197	16	0,6	10PHD 220197
225	202	16	0,6	10PHD 225202
230	207	16	0,6	10PHD 230207
240	217	16	0,6	10PHD 240217
250	222	17,5	0,6	10PHD 250222
250	230	16	0,6	10PHD 250230
260	232	17,5	0,6	10PHD 260232
270	242	17,5	0,6	10PHD 270242
280	252	17,5	0,6	10PHD 280252
290	262	17,5	0,6	10PHD 290262
300	272	17,5	0,6	10PHD 300272
320	292	17,5	0,6	10PHD 320292



0-30 MPa	30-40 MPa
e (mm)	
≤ 0,5	≤ 0,3

10PHD.../PU piston seal is a combination of a PU sealing element energised by an elastomer profile ring, completed with two back-up rings.

The activated **back-up rings** offer a good protection against extrusion and ensure a long service life.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 110°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Sealing element ①	PU38
Anti-extrusion rings ②	POM84
Energising element ③	NBR8480

Assembly see pages 54-59

On one-piece pistons

Advantages

Simple groove design
Small sections
Extrusion resistance at high pressure
Excellent abrasion resistance
Low friction

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	r	Reference
50	36	9	0,3	10PHD 5036/PU
55	41	9	0,3	10PHD 5541/PU
60	46	9	0,3	10PHD 6046/PU
60	50	8	0,3	10PHD 6050/PU
63	48	11	0,5	10PHD 6348/PU
65	50	11	0,5	10PHD 6550/PU
70	55	11	0,5	10PHD 7055/PU
75	60	11	0,5	10PHD 7560/PU
80	65	11	0,5	10PHD 8065/PU
80	70	11	0,5	10PHD 8070/PU
85	70	11	0,5	10PHD 8570/PU
90	75	11	0,5	10PHD 9075/PU
95	80	11	0,5	10PHD 9580/PU
100	85	12,5	0,5	10PHD 10085/PU
105	88	14	0,5	10PHD 10588/PU
105	90	12,5	0,5	10PHD 10590/PU
110	95	12,5	0,5	10PHD 11095/PU
115	100	12,5	0,5	10PHD 115100/PU
120	105	12,5	0,5	10PHD 120105/PU
125	102	16	0,6	10PHD 125102/PU
130	107	16	0,6	10PHD 130107/PU
135	112	16	0,6	10PHD 135112/PU
140	117	16	0,6	10PHD 140117/PU
145	122	16	0,6	10PHD 145122/PU
150	127	16	0,6	10PHD 150127/PU
160	137	16	0,6	10PHD 160137/PU
170	147	16	0,6	10PHD 170147/PU
190	167	16	0,6	10PHD 190167/PU
200	177	16	0,6	10PHD 200177/PU
225	202	16	0,6	10PHD 225202/PU
250	222	17,5	0,6	10PHD 250222/PU
250	227	16	0,6	10PHD 250227/PU



10KRGG piston rings from special cast iron material are used in exceptional applications demanding performance in temperature and velocity.

In comparison to other seals, they are not sensitive to pressures peaks.

Operating conditions

✕ see page 8

Pressure	≤ 200 MPa
Temperature	-60°C to 250°C
Speed	≤ 40 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Sealing element	Cast iron
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Assembly

✕ see pages 54-59

On one-piece pistons

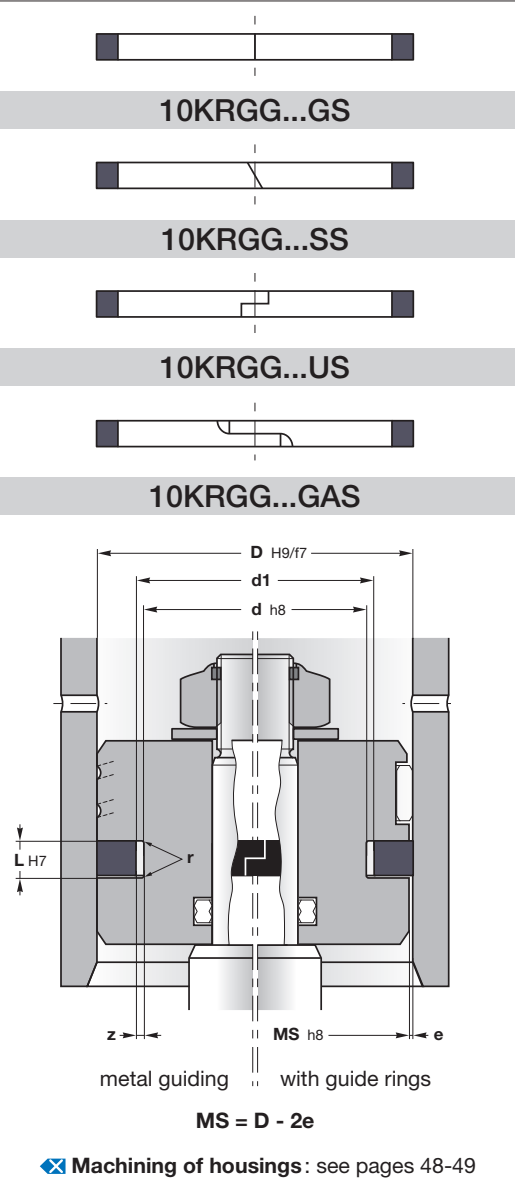
Advantages

Good dynamic sealing
Perfect extrusion resistance
Good abrasion resistance
Long service life
Extreme temperature range of application
Overtravelling of cylinder bores possible without damage
In combination with elastomer seals, this can be put to protective use against pressure peaks and diesel effects

Please contact us for applications approaching maximum values.

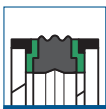
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.



D (mm)	z (mm)	r (mm)	e (mm)
≤ 100	0,5	0,15	0,5
> 100	0,8	0,3	1

D	d	d1	L	Reference
25	22	23	3	10KRGG 025 US
40	35	36	2	10KRGG 040 US
50	44,4	45,4	2,5	10KRGG 050 US
60	54	55	2,5	10KRGG 060 US
70	63,5	64,5	2,5	10KRGG 070 US
80	72,6	73,6	2,5	10KRGG 080 GS
100	90,4	92	2,5	10KRGG 100 US
125	113,8	115,4	4	10KRGG 125 US
150	137	138,6	4	10KRGG 150 US
180	166,4	168	5	10KRGG 180 US

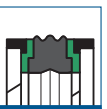


10DBS

Double acting piston seal with guide rings

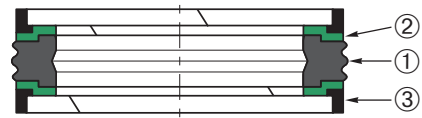


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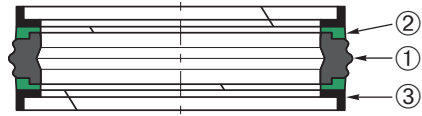
11DBS...FPM page 563

10DBS/I: Inch dimensions page 565



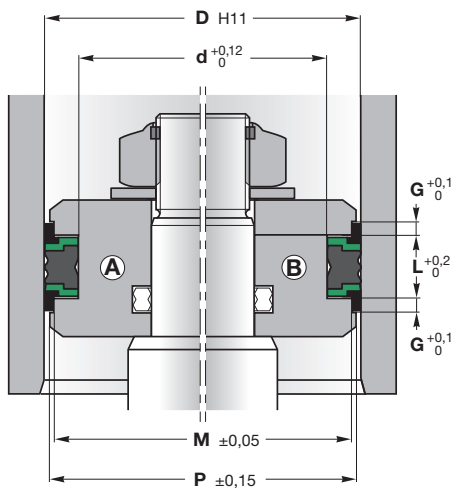
10DBS

Profile a



10DBS

Profile b



Machining of housings: see pages 48-49

10DBS piston seal is a double acting seal and guide element composed of a sealing rubber element, two anti-extrusion rings and two guide rings.

The rubber part has a low compression set which ensures good sealing performance. It is designed with three seal edges which share the load against the cylinder tube. The three seal edges also form two cavities which keep small quantities of fluid that **increase the service life**. The design of the static side provides a wide contact area and prevents distortion inside the groove during installation.

The back-up rings prevent extrusion into the gap and **avoid the rotation** of the rubber part. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load. This piston seal is available in different profiles depending on the existing installation groove.

Operating conditions see page 8

Pressure	≤ 35 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal ①	NBR2475 or NBR3470
Anti-extrusion rings ②	TPE63
Guide rings ③	POM/GF1

Assembly see pages 54-59

- On one-piece pistons ①
- On two-piece pistons ②

Advantages

- Efficient sealing at high and low pressure
- Easy installation on monobloc pistons
- Guiding and sealing are performed by the seal
- Good results with drawn tubes
- Simple design for one piece pistons

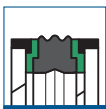
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	ISO 6647	Profile 10DBS	Alternative reference	Reference
20	11	13,5	2,1	17	19		a		10DBS 20 11/M
22	13	13,5	2,1	19	21		a		10DBS 22 13/M
25	15	12	4	21	23		a		10DBS 25 15/1
	15	12,5	4	22	24	•	a		10DBS 25 15/ISO
	15	16,4	6,35	21,45	23,5		a		10DBS 25 15
28	16	13,5	2,1	22	24		a		10DBS 25 16/M
	17	13,5	3,2	21	24,4		b		10DBS 25 17/SI
28	19	13,5	2,1	25	27		a		10DBS 28 19/M
30	17	15,4	6,35	26,5	28,5		a	15DBSE 30 17	10DBS 30 17
	21	13,5	2,1	27	29		a	15DBSE 30 21/M	10DBS 30 21/M
32	22	12,5	4	29	31	•	a		10DBS 32 22/ISO
	22	15,5	2,6	28	31		a	15DBSE 32 22/M	10DBS 32 22/M
	22	16,4	6,35	28,5	30,5		a	15DBSE 32 22	10DBS 32 22
35	24	10	4	29	31	•	a		10DBS 32 24/ISO
	24	15,5	3,2	28	31,4		b	15DBSE 32 24/SI	10DBS 32 24/SI
35	25	15,5	2,6	31	34		a		10DBS 35 25/M
	25	16,4	6,35	31,4	33,5		a	15DBSE 35 25	10DBS 35 25
	27	15,5	3,2	31	34,4		b		10DBS 35 27/SI
40	24	18,4	6,35	35,4	38,5		a	15DBSE 40 24	10DBS 40 24
	26	15,5	2,6	36	39		a	15DBSE 40 26/M	10DBS 40 26/M
	30	12,5	4	36	38		a	15DBSE 40 30/1	10DBS 40 30/1
30	30	12,5	4	37	39	•	a	15DBSE 40 30/ISO	10DBS 40 30/ISO
	30	16,4	6,35	35,4	38,5		a	15DBSE 40 30	10DBS 40 30
	32	10	4	37	39	•	a		10DBS 40 32/ISO
42	32	15,5	3,2	36	39,4		b	15DBSE 40 32/SI	10DBS 40 32/SI
	42	28	15,5	2,6	38	41	a		10DBS 42 28/M
45	29	18,4	6,35	40,4	43,5		a	15DBSE 45 29	10DBS 45 29
	31	15,5	2,6	41	44		a	15DBSE 45 31/M	10DBS 45 31/M
	35	16,4	6,35	40,4	43,5		a	15DBSE 45 35	10DBS 45 35
37	37	15,5	3,2	41	44,4		b		10DBS 45 37/SI
	50	34	18,4	6,35	45,41	48,66	a	15DBSE 50 34	10DBS 50 34
34	34	20,5	3,1	46	49		a	15DBSE 50 34/M	10DBS 50 34/M
	35	20	5	46	48,5	•	a		10DBS 50 35/ISO
38	38	20,5	4,2	46	49,4		b	15DBSE 50 38/SI	10DBS 50 38/SI
	40	12,5	4	47	49	•	a		10DBS 50 40/ISO
55	39	18,4	6,35	50,37	53,65		a	15DBSE 55 39	10DBS 55 39
	39	20,5	3,1	51	54		a	15DBSE 55 39/M	10DBS 55 39/M
	43	20,5	4,2	51	54,4		b		10DBS 55 43/SI
45	45	12,5	4	52	54	•	a		10DBS 55 45/ISO
	56	40	20,5	3,1	52	55	a		10DBS 56 40/M

10DBS seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be

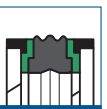


10DBS

Double acting piston seal with guide rings



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10DBS/I: Inch dimensions page 565

10DBS piston seal is a double acting seal and guide element composed of a sealing rubber element, two anti-extrusion rings and two guide rings.

The rubber part has a low compression set which ensures good sealing performance. It is designed with three seal edges which share the load against the cylinder tube. The three seal edges also form two cavities which keep small quantities of fluid that **increase the service life**. The design of the static side provides a wide contact area and prevents distortion inside the groove during installation.

The back-up rings prevent extrusion into the gap and **avoid the rotation** of the rubber part. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load. This piston seal is available in different profiles depending on the existing installation groove.

Operating conditions see page 8

Pressure	≤ 35 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal ①	NBR2475 or NBR3470
Anti-extrusion rings ②	TPE63
Guide rings ③	POM/GF1

Assembly see pages 54-59

- On one-piece pistons ①
- On two-piece pistons ②

Advantages

- Efficient sealing at high and low pressure
- Easy installation on monobloc pistons
- Guiding and sealing are performed by the seal
- Good results with drawn tubes
- Simple design for one piece pistons

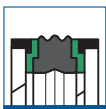
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	ISO 6647	Profile 10DBS	Alternative reference	Reference
60	44	18,4	6,35	55,39	58,65		a	15DBSE 60 44	10DBS 60 44
	44	20,5	3,1	56	59		a	15DBSE 60 44/M	10DBS 60 44/M
	48	20,5	4,2	56	59,4		b	15DBSE 60 48/SI	10DBS 60 48/SI
63	47	18,4	6,35	58,39	61,63		a	15DBSE 63 47	10DBS 63 47
	47	19,4	6,35	58,4	61,5		a	15DBSE 63 47/2	10DBS 63 47/2
	47	20,5	3,1	59	62		a	15DBSE 63 47/M	10DBS 63 47/M
65	48	20	5	59	61,5	•	a		10DBS 63 48/ISO
	51	20,5	4,2	59	62,4	•	b	15DBSE 63 51/SI	10DBS 63 51/SI
	53	12,5	4	60	62	•	a		10DBS 63 53/ISO
70	49	20,5	4,1	61	64		a	15DBSE 65 49/M	10DBS 65 49/M
	50	18,4	6,35	60,41	63,64		a	15DBSE 65 50	10DBS 65 50
75	50	22,4	6,35	64,18	68,34		a	15DBSE 70 50	10DBS 70 50
	54	20,5	3,1	66	69		a	15DBSE 70 54/M	10DBS 70 54/M
	55	20	5	66	68,5	•	a		10DBS 70 55/ISO
80	58	20,5	4,2	66	69,4		b	15DBSE 70 58/SI	10DBS 70 58/SI
	55	22,4	6,35	69,18	73,32		a	15DBSE 75 55	10DBS 75 55
	59	20,5	3,1	71	74		a		10DBS 75 59/M
85	60	22,4	6,35	74,16	78,34		a	15DBSE 80 60	10DBS 80 60
	60	25	6,3	75	78	•	a		10DBS 80 60/ISO
	62	22,5	3,6	76	79		a	15DBSE 80 62/M	10DBS 80 62/M
90	65	20	5	76	78,5	•	a		10DBS 80 65/ISO
	66	22,5	5,2	76	79,4		b	15DBSE 80 66/SI	10DBS 80 66/SI
95	65	22,4	6,35	79,16	83,34		a	15DBSE 85 65	10DBS 85 65
	70	22,4	6,35	84,15	88,31		a	15DBSE 90 70	10DBS 90 70
	72	22,5	3,6	86	89		a	15DBSE 90 72/M	10DBS 90 72/M
100	75	20	5	86	88,5	•	a		10DBS 90 75/ISO
	76	22,5	5,2	86	89,4		b	15DBSE 90 76/SI	10DBS 90 76/SI
	75	22,4	6,35	89,15	93,31		a	15DBSE 95 75	10DBS 95 75
105	75	22,4	6,35	93,14	98,05		a	15DBSE 100 75	10DBS 100 75
	80	25	6,3	95	98	•	a		10DBS 100 80/ISO
	80	25,4	6,35	94,15	98,31		a		10DBS 100 80
110	82	22,5	3,6	96	99		a	15DBSE 100 82/M	10DBS 100 82/M
	85	20	5	96	98,5	•	a		10DBS 100 85/ISO
	86	22,5	5,2	96	99,4		b	15DBSE 100 86/SI	10DBS 100 86/SI
115	80	22,4	6,35	98,09	103,03		a	15DBSE 105 80	10DBS 105 80
	85	22,4	6,35	103,1	108		a	15DBSE 110 85	10DBS 110 85
	85	25,4	6,35	103,1	108		a		10DBS 110 85/1
120	90	25,4	6,35	104,1	108,3		a		10DBS 110 90
	92	22,5	3,6	106	109		a	15DBSE 110 92/M	10DBS 110 92/M
	95	20	5	105	108,5		a		10DBS 110 95
	96	22,5	5,2	106	109,4		b	15DBSE 110 96/SI	10DBS 110 96/SI

Machining of housings: see pages 48-49

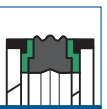


10DBS

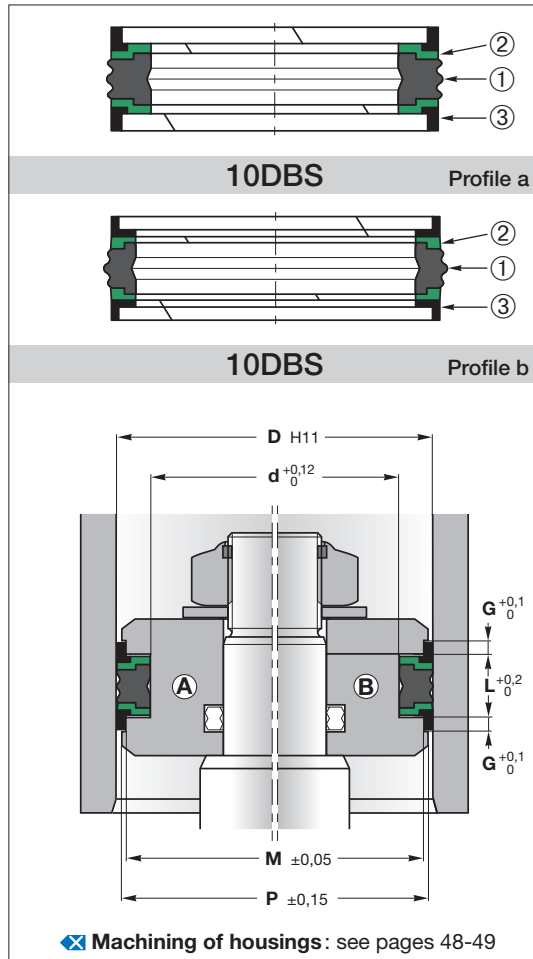
Double acting piston seal with guide rings



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11DBS...FPM page 563 10DBS/I: Inch dimensions page 565



10DBS piston seal is a double acting seal and guide element composed of a sealing rubber element, two anti-extrusion rings and two guide rings.

The rubber part has a low compression set which ensures good sealing performance. It is designed with three seal edges which share the load against the cylinder tube. The three seal edges also form two cavities which keep small quantities of fluid that **increase the service life**. The design of the static side provides a wide contact area and prevents distortion inside the groove during installation.

The back-up rings prevent extrusion into the gap and **avoid the rotation** of the rubber part. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load. This piston seal is available in different profiles depending on the existing installation groove.

Operating conditions see page 8

Pressure	≤ 35 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal ①	NBR2475 or NBR3470
Anti-extrusion rings ②	TPE63
Guide rings ③	POM/GF1

Assembly see pages 54-59

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

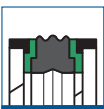
- Efficient sealing at high and low pressure
- Easy installation on monobloc pistons
- Guiding and sealing are performed by the seal
- Good results with drawn tubes
- Simple design for one piece pistons

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	ISO 6647	Profile 10DBS	Alternative reference	Reference
115	90	22,4	6,35	108,1	113,02		a	15DBSE 115 90	10DBS 115 90
	97	22,5	3,6	111	114		a	15DBSE 115 97/M	10DBS 115 97/M
120	95	22,4	6,35	113,1	118,02		a	15DBSE 120 95	10DBS 120 95
	106	22,5	5,2	116	119,4		b	15DBSE 120106/SI	10DBS 120106/SI
125	100	25,4	6,35	118,08	122,96		a	15DBSE 125100	10DBS 125100
	100	32	10	119	123	•	a		10DBS 125100/ISO
	103	26,5	5,1	121	124		a	15DBSE 125103/M	10DBS 125103/M
	105	25	6,35	119,1	123,3		a		10DBS 125105
	105	25	6,3	120	123	•	a		10DBS 125105/ISO
130	108	26,5	7,2	121	124,4		b	15DBSE 125108/SI	10DBS 125108/SI
	105	25,4	9,52	122,6	127,5		a	15DBSE 130105	10DBS 130105
	105	25,4	6,35	123,1	128		a		10DBS 130105/1
	110	25,3	6,4	124,1	128,3		a		10DBS 130110
	113	26,5	7,2	126	129,4		b		10DBS 130113/SI
135	110	25,4	9,52	127,6	132,5		a	15DBSE 135110	10DBS 135110
	110	25,4	6,35	128,1	133		a		10DBS 135110/1
140	115	25,4	9,52	132,6	137,5		a	15DBSE 140115	10DBS 140115
	115	25,4	6,35	133	138		a	15DBSE 140115/1	10DBS 140115/1
	118	26,5	5,1	136	139		a	15DBSE 140118/M	10DBS 140118/M
145	120	25	6,3	135	138	•	a		10DBS 140120/ISO
	123	26,5	7,2	136	139,4		b		10DBS 140123/SI
	120	25,4	9,52	137,6	142,5		a		10DBS 145120
150	120	25,4	6,35	138,3	142,95		a		10DBS 145120/1
	125	25,4	9,52	142,6	147,5		a	15DBSE 150125	10DBS 150125
	125	25,4	6,35	143	148		a		10DBS 150125/1
155	128	26,5	5,1	146	149		a	15DBSE 150128/M	10DBS 150128/M
	130	25,4	6,35	144,1	148,3		a		10DBS 150130
	133	26,5	7,2	146	149,4		b		10DBS 150133/SI
160	130	25,4	9,52	152,6	157,5		a	15DBSE 160130	10DBS 160130
	130	25,4	6,35	153	157,5		a		10DBS 160130/1
165	135	25,4	9,52	152,6	157,5		a	15DBSE 160135	10DBS 160135
	135	32	10	154	158	•	a		10DBS 160135/ISO
	138	26,5	5,1	156	159		a	15DBSE 160138/M	10DBS 160138/M
170	140	25	6,3	155	158	•	a		10DBS 160140/ISO
	143	26,5	7,2	156	159,4		b		10DBS 160143/SI
	140	25,4	9,52	157,6	162,5		a	15DBSE 165140	10DBS 165140
175	140	25,4	6,4	163	168		a		10DBS 170140
	145	25,4	12,7	161,72	167,1		a	15DBSE 170145	10DBS 170145
	148	26,5	5,1	166	169		a		10DBS 170148/M
175	150	25,4	12,7	166,72	172,1		a	15DBSE 175150	10DBS 175150

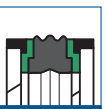


10DBS

Double acting piston seal with guide rings

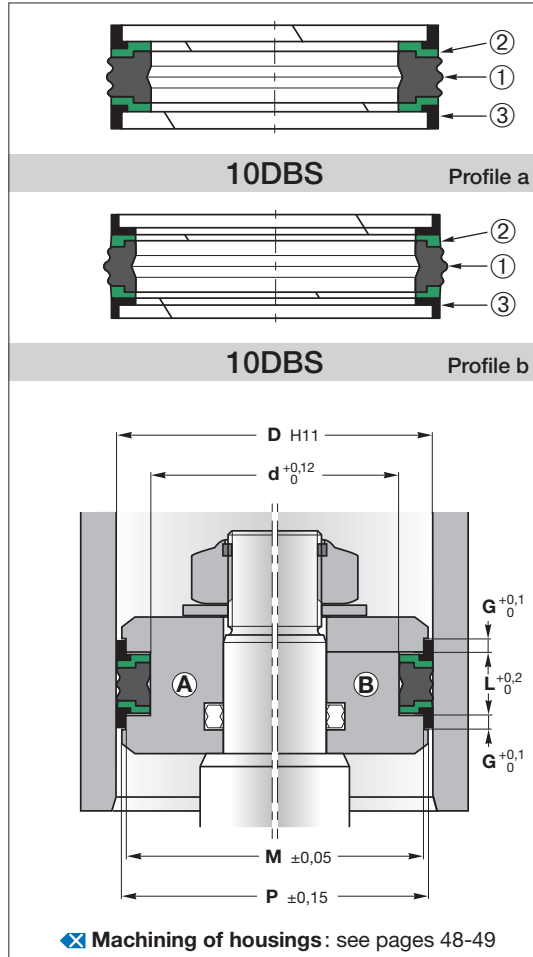


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10DBS/I: Inch dimensions page 565



10DBS piston seal is a double acting seal and guide element composed of a sealing rubber element, two anti-extrusion rings and two guide rings.

The rubber part has a low compression set which ensures good sealing performance. It is designed with three seal edges which share the load against the cylinder tube. The three seal edges also form two cavities which keep small quantities of fluid that **increase the service life**. The design of the static side provides a wide contact area and prevents distortion inside the groove during installation.

The back-up rings prevent extrusion into the gap and **avoid the rotation** of the rubber part. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load. This piston seal is available in different profiles depending on the existing installation groove.

Operating conditions see page 8

Pressure	≤ 35 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal ①	NBR2475 or NBR3470
Anti-extrusion rings ②	TPE63
Guide rings ③	POM/GF1

Assembly see pages 54-59

- On one-piece pistons (A)
- On two-piece pistons (B)

Advantages

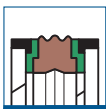
- Efficient sealing at high and low pressure
- Easy installation on monobloc pistons
- Guiding and sealing are performed by the seal
- Good results with drawn tubes
- Simple design for one piece pistons

Please contact us for applications approaching maximum values.

More information

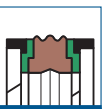
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	ISO 6547	Profile 10DBS	Alternative reference	Reference
180	150	35,4	6,35	172,95	177,87		a	15DBSE 180150	10DBS 180150
	155	25,4	12,7	171,72	177,1		a	15DBSE 180155	10DBS 180155
	158	26,5	5,1	176	179		a		10DBS 180158/M
185	160	25,4	12,7	176,72	182,1		a	15DBSE 185160	10DBS 185160
190	165	25,4	12,7	181,72	187,05		a	15DBSE 190165	10DBS 190165
195	170	25,4	12,7	186,72	192,05		a		10DBS 195170
200	170	35,4	6,35	192,96	197,84		a	15DBSE 200170	10DBS 200170
	170	36	12,5	192	197	•	a		10DBS 200170/ISO
	175	25,4	12,7	191,62	197		a	15DBSE 200175	10DBS 200175
175	31,5	6,6	196	199			a	15DBSE 200175/M	10DBS 200175/M
	180	31,5	9,2	196	199,4		b		10DBS 200180/SI
210	185	25,4	12,7	201,62	207		a		10DBS 210185
220	190	35,4	6,35	212,7	217,9		a	15DBSE 220190	10DBS 220190
	195	25,4	12,7	211,62	217		a	15DBSE 220195	10DBS 220195
225	200	25,4	12,7	216,62	222		a		10DBS 225200
230	205	25,4	12,7	221,62	227		a		10DBS 230205
240	215	25,4	12,7	231,62	237		a		10DBS 240215
250	220	35,4	6,35	242,9	247,85		a	15DBSE 250220	10DBS 250220
	225	25,4	12,7	241,62	247		a	15DBSE 250225	10DBS 250225
260	235	25,4	12,7	252,9	257		a		10DBS 260235
280	250	35,4	9,52	272,9	277		a		10DBS 280250
320	290	36	12,5	312	317	•	a		10DBS 320290/ISO

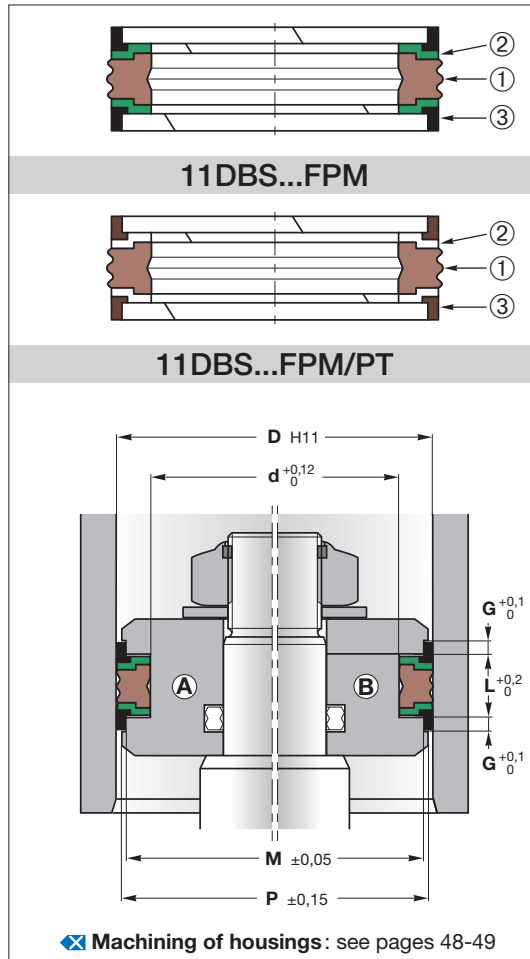


11DBS...FPM

FPM double acting piston seal with guide rings



10DBS/I: Inch dimensions [X](#) page 565



11DBS.../FPM is especially suitable for applications where there is contact with aggressive fuels and chemicals.

The piston seal 11DBS.../FPM is a double acting seal and guide element composed of a FPM sealing element, two TPE anti-extrusion rings and two POM guide rings.

The piston seal 11DBS.../FPM/PT is a double acting seal and guide element composed of a FPM sealing element, two PTFE virgin anti-extrusion rings and two PTFE bronze guide rings.

The sealing ring has a low compression set which ensures good sealing performance. It is designed with three seal edges which share the load against the cylinder tube. The three seal edges also form two cavities which keep small quantities of fluid that **increase the service life**. The design of the static side provides a wide contact area and prevents distortion inside the groove during installation.

The back-up rings prevent extrusion into the gap and **avoid the rotation** of the rubber part. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load. This piston seal is available in different profiles depending on the existing installation groove.

Operating conditions

[X](#) see page 8

Pressure ≤ 35 MPa

Temperature
11DBS...FPM -10°C to 120°C
11DBS...FPM/PT -10°C to 200°C

Speed $\leq 0,5$ m/s

Fluids [X](#) see pages 22-45

Materials

[X](#) see pages 10-19

Seal ① FPM

Anti-extrusion rings ②
11DBS...FPM TPE63
11DBS...FPM/PT PT01

Guide rings ③
11DBS...FPM POM/GF1
11DBS...FPM/PT PT55

Assembly

[X](#) see pages 54-59

On one-piece pistons ④

On two-piece pistons ⑤

Advantages

- Excellent resistance to chemical agents for 11DBS...FPM/PT
- Large temperature range for 11DBS...FPM/PT
- Efficient sealing at high and low pressure
- Easy installation on monobloc pistons
- Guiding and sealing are performed by the seal
- Good results with drawn tubes
- Simple design for one piece pistons

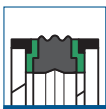
Please contact us for applications approaching maximum values.

11DBS...FPM						
D	d	L	G	M	P	Reference
40	30	16,4	6,35	35,4	38,5	11DBS 4030 FPM
50	34	18,4	6,35	45,41	48,66	11DBS 5034 FPM
60	44	18,4	6,35	55,39	58,65	11DBS 6044 FPM
63	47	18,4	6,35	58,39	61,63	11DBS 6347 FPM
70	50	22,4	6,35	64,18	68,34	11DBS 7050 FPM
80	60	22,4	6,35	74,16	78,34	11DBS 8060 FPM
90	70	22,4	6,35	84,15	88,31	11DBS 9070 FPM
100	75	22,4	6,35	93,14	98,05	11DBS 10075 FPM
110	85	22,4	6,35	103,1	108	11DBS 11085 FPM

11DBS...FPM/PT						
D	d	L	G	M	P	Reference
40	30	16,4	6,35	35,4	38,5	11DBS 4030 FPM/PT
50	34	18,4	6,35	45,41	48,66	11DBS 5034 FPM/PT
60	44	18,4	6,35	55,39	58,65	11DBS 6044 FPM/PT
63	47	18,4	6,35	58,39	61,63	11DBS 6347 FPM/PT
70	50	22,4	6,35	64,18	68,34	11DBS 7050 FPM/PT
80	60	22,4	6,35	74,16	78,34	11DBS 8060 FPM/PT
90	70	22,4	6,35	84,15	88,31	11DBS 9070 FPM/PT
100	75	22,4	6,35	93,14	98,05	11DBS 10075 FPM/PT

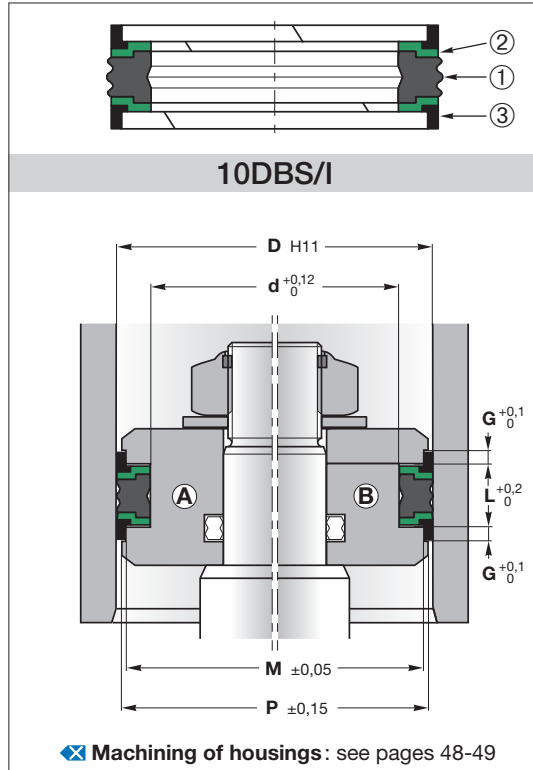
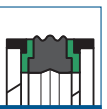
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.



10DBS/I

Double acting piston seal with guide rings Inch dimensions



10DBS/I piston seal is a double acting seal and guide element composed of a sealing rubber element, two anti-extrusion rings and two guide rings.

The rubber part has a low compression set which ensures good sealing performance. It is designed with three seal edges which share the load against the cylinder tube. The three seal edges also form two cavities which keep small quantities of fluid that **increase the service life**. The design of the static side provides a wide contact area and prevents distortion inside the groove during installation.

The back-up rings prevent extrusion into the gap and **avoid the rotation** of the rubber part. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load. This piston seal is available in different profiles depending on the existing installation groove.

Operating conditions see page 8

Pressure	≤ 35 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal ①	NBR
Anti-extrusion rings ②	Polyester resin
Guide rings ③	Acetal resin

Assembly see pages 54-59

- On one-piece pistons ①
- On two-piece pistons ②

Advantages

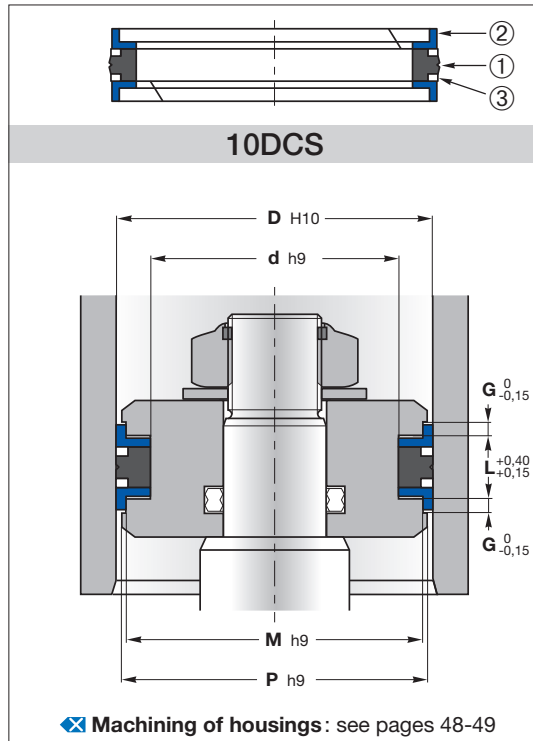
- Efficient sealing at high and low pressure
- Easy installation on monobloc pistons
- Guiding and sealing are performed by the seal
- Good results with drawn tubes
- Simple design for one-piece pistons

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Inch dimensions						
D	d	L	G	M	P	Reference
38,1	25,4	15,87	6,35	34,54	37,08	10DBS/I 150100
44,45	28,57	19,05	6,35	39,87	43,12	10DBS/I 175112
50,8	34,92	19,05	6,35	46,23	49,48	10DBS/I 200137
50,8	41,27	11,1	3,81	46,27	49,19	10DBS/I 200162
53,97	38,1	19,05	6,35	49,4	52,7	10DBS/I 212150
57,15	41,28	19,05	6,35	52,55	55,8	10DBS/I 225162
60,32	44,45	19,05	6,35	55,73	58,98	10DBS/I 237175
63,5	47,62	19,05	6,35	58,9	62,12	10DBS/I 250187
63,5	53,97	11,1	3,8	59	62,12	10DBS/I 250212
66,67	50,8	19,05	6,35	62,1	65,27	10DBS/I 262200
69,85	50,8	23,8	6,35	64,06	68,2	10DBS/I 275200
69,85	57,15	16,51	6,35	65,23	68,83	10DBS/I 275225
76,2	57,15	23,8	6,35	70,4	74,5	10DBS/I 300225
82,55	63,5	23,8	6,35	76,73	80,87	10DBS/I 325250
88,9	69,85	23,8	6,35	83,08	87,22	10DBS/I 350275
95,25	76,2	23,8	6,35	89,41	93,55	10DBS/I 375300
101,6	82,55	23,8	6,35	95,76	99,9	10DBS/I 400325
114,3	88,9	31,75	6,35	107,42	112,32	10DBS/I 450350
127	101,6	31,75	9,53	119,61	124,51	10DBS/I 500400
152,4	127	31,75	9,52	145	149,91	10DBS/I 600500
165,1	139,7	31,75	6,35	157,82	162,6	10DBS/I 650550
165,1	139,7	31,75	9,52	157,82	162,6	10DBS/I 650550/1
177,8	152,4	31,75	9,52	170,51	175,52	10DBS/I 700600
203,2	177,8	31,75	9,52	196,16	201,18	10DBS/I 800700



10DCS piston seal is a double acting seal and guide element composed of a sealing rubber element, two endless anti-extrusion rings and two guide rings. This piston seal is designed for one piece pistons.

The back-up rings are fitted on the outside diameter of the rubber part and **prevent extrusion** into the gap. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load.

Operating conditions see page 8

Pressure ≤ 25 MPa
Temperature -30°C to 100°C
Speed $\leq 0,5$ m/s
Fluids  see pages 22-45

Materials see pages 10-19

Seal ① NBR
Guide rings ② Acetal resin
Anti-extrusion rings ③ PTFE

Assembly see pages 54-59

On one-piece pistons

Advantages

Efficient sealing at high and low pressure
Easy installation on monobloc pistons
Very compact groove dimensions

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	Reference
25	17,5	8,5	3,25	21,3	24	10DCS 2517
32	22	11	4	27,5	31	10DCS 3222
40	30	11	4	35,5	39	10DCS 4030
50	40	11	4	45,5	49	10DCS 5040
55	45	11	4	50,5	54	10DCS 5545
63	53	11	4	58,5	61,5	10DCS 6353
80	70	11	4	75,5	78,5	10DCS 8070
100	87	14	6	93,8	98,5	10DCS 10087
125	112	14	6	118,8	123,5	10DCS 125112

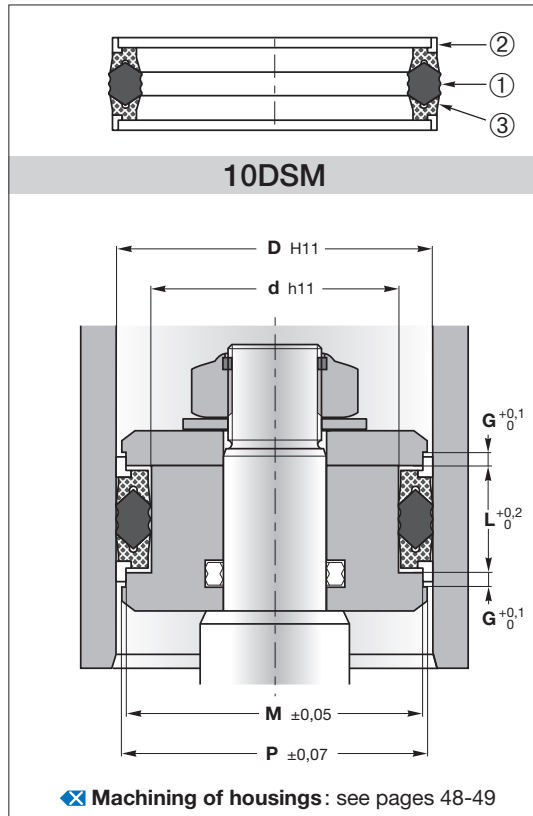


10DSM

Double acting Selemaster



SEALTECH
Hydraulic Seals Technology



✕ Machining of housings: see pages 48-49

10DSM piston seal has been created for high pressure working cylinders. The main sealing element has a low compression set and is designed with seal edges which share the load against the cylinder tube and ensure good sealing performance.

This seal edges also form cavities which keep small quantities of fluid that **reduce friction and wear**. The two support rings are made of cotton fabric reinforced nitrile elastomer. The U-ring is energised when pressure is applied. The guide rings support radial load and also have the function of anti-extrusion rings.

The **Selemaster** is suitable for applications working at high pressures and subjected to severe loading and vibration conditions.

Operating conditions ✕ see page 8

Pressure	≤ 70 MPa
Temperature	-40°C to 130°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Seal ①	N8T60 (NBR)
Guide rings ②	PO0WC
Support rings ③	N8T60-C

Assembly ✕ see pages 54-59

On two-piece pistons

Advantages

- Efficient sealing at severe working conditions (vibration and shock loading)
- High resistance against extrusion
- High sealing efficiency

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	Alternative reference	Reference
45	29	32	6,35	38,8	42,85		10DSM 177114/1A
50	34	32	6,35	43,77	47,85		10DSM 196133/1A
55	40	32	6,35	48,77	52,85	15DSME 5540/1A	10DSM 216157/1A
60	44	32	6,35	53,8	57,8		10DSM 236173/1A
65	49	32	6,35	58,7	62,8		10DSM 255192/1A
70	50	35	9,52	62,62	67,54	15DSME 7050/1A	10DSM 275196/1A
75	55	35	9,52	67,7	72,54		10DSM 295216/1A
80	60	35	9,52	72,62	77,52	15DSME 8060/1A	10DSM 314236/1A
80	64	32	9,52	72,62	77,52		10DSM 314251/1A
85	65	35	9,52	77,62	82,54		10DSM 334255/1A
90	70	35	9,52	82,58	87,79	15DSME 9070/1A	10DSM 354275/1A
95	75	35	9,52	87,6	92,5		10DSM 374295/1A
100	80	35	9,52	92,6	97,5	15DSME 10080/1A	10DSM 393314/1A
101,6	82,55	34,92	9,52	94,2	99,1		10DSM 400325/1A
110	85	45	12,7	101,82	107,33	15DSME 11085/1A	10DSM 433334/1A
110	90	35	9,52	102,7	107,51		10DSM 433354/1A
120	95	45	12,7	111,82	117,33	15DSME 12095/1A	10DSM 472374/1A
120	100	35	9,52	112,8	117,51	15DSME 120100/1A	10DSM 472393/1A
125	100	45	12,7	116,82	122,33	15DSME 125100/1A	10DSM 492393/1A
130	105	45	12,7	121,82	127,33		10DSM 511413/1A
130	110	35	9,52	122,7	127,33		10DSM 511433/1A
135	110	45	12,7	126,82	132,33		10DSM 531433/1A
140	115	45	12,7	131,72	137,3	15DSME 140115/1A	10DSM 551452/1A
140	120	35	9,52	132,7	137,3	15DSME 140120/1A	10DSM 551472/1A
150	125	45	12,7	141,72	147,3	15DSME 150125/1A	10DSM 590492/1A
152,4	127	44,45	12,7	144,15	149,7		10DSM 600500/1A
160	135	45	12,7	151,72	157,1	15DSME 160135/1A	10DSM 629531/1A
165	135	45	12,7	158	162,1		10DSM 649531/1A
170	140	45	12,7	163	167,87	15DSME 170140/1A	10DSM 669551/1A
180	155	45	12,7	171,6	177,1	15DSME 180155/1A	10DSM 708610/1A
185	160	45	12,7	176,72	182,1		10DSM 728629/1A
190	165	45	12,7	181,72	187,1	15DSME 190165/1A	10DSM 748649/1A
200	175	45	12,7	191,72	197,1	15DSME 200175/1A	10DSM 787688/1A
210	185	45	12,7	201,6	207,1		10DSM 826728/1A
220	195	45	12,7	211,6	217,1	15DSME 220195/1A	10DSM 866767/1A
230	205	45	12,7	221,72	227,1		10DSM 905807/1A
240	215	45	12,7	231,72	237,1		10DSM 944846/1A
250	225	45	12,7	241,72	247,1	15DSME 250225/1A	10DSM 984886/1A
260	235	45	12,7	251,72	257,1	15DSME 260235/1A	10DSM 1024925/1A
270	245	45	12,7	261,72	267,1		10DSM 1062965/1A
280	255	45	12,7	271,72	277,1	15DSME 280255/1A	10DSM 11021004/1A
290	265	45	12,7	281,72	287,1		10DSM 11411043/1A
300	275	45	12,7	291,72	297,1	15DSME 300275/1A	10DSM 11811082/1A
360	335	44,5	12,7	351,76	357,33		10DSM 14171318/1A
380	355	45	12,7	371,75	377,33		10DSM 14961397/1A

10DSM seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.

For prices and availability: www.sealtech-business.be



10DPS

Fabric reinforced NBR piston seal with guide rings



11DPS...FPM page 573

10DPS is a double acting piston seal and guide element composed of a sealing rubber reinforced element and two guide rings. The dynamic side of the rubber part is fabric reinforced (fabric reinforced nitrile elastomer has a higher mechanical strength and better lubricating properties).

The section of the seal has been reduced **to optimise** its installation in closed grooves.

Operating conditions see page 8

Pressure ≤ 35 MPa
 Temperature -30°C to 130°C
 Speed ≤ 0,5 m/s
 Fluids see pages 22-45

Materials see pages 10-19

Seal ① N8T60-C/N8T60
 Guide rings ② PO0WC

Assembly see pages 54-59

On one-piece pistons ①
 On two-piece pistons ②

Advantages

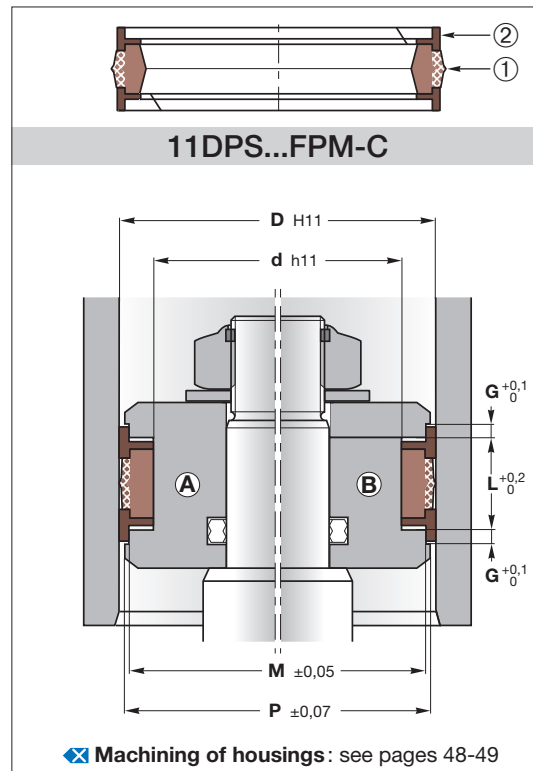
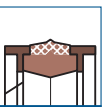
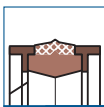
Good sealing effect
 Compact groove dimensions
 Guiding and sealing are performed by the seal
 Low friction

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	d1	E	Alternative reference	Reference
25	17	10	4	22	24				10DPS 2517-1
25	17	13,5	3,2	21	24,4	14	2,1		10DPS 2517/SI
30	22	13,5	3,2	26	29,4	19	2,1	15DPSE 3022/SI	10DPS 3022/SI
32	24	15,5	3,2	28	31,4				10DPS 3224
32	24	10	4	29	31				10DPS 3224-1
32	24	15,5	3,2	28	31,4	21	3,1	15DPSE 3224/SI	10DPS 3224/SI
35	27	15,5	3,2	31	34,4				10DPS 3527
35	27	15,5	3,2	31	34,4	24	3,1	15DPSE 3527/SI	10DPS 3527/SI
40	32	15,5	3,2	36	39,4				10DPS 4032
40	32	10	4	37	39				10DPS 4032-1
40	32	15,5	3,2	36	39,4	29	3,1	15DPSE 4032/SI	10DPS 4032/SI
45	37	15,5	3,2	41	44,4				10DPS 4537
45	37	15,5	3,2	41	44,4	34	3,1	15DPSE 4537/SI	10DPS 4537/SI
50	38	20,5	4,2	46	49,4			15DPSE 5038	10DPS 5038
50	40	12,5	4	47	49				10DPS 5040-1
55	43	20,5	4,2	51	54,4			15DPSE 5543	10DPS 5543
60	48	20,5	4,2	56	59,4			15DPSE 6048	10DPS 6048
63	51	20,5	4,2	59	62,4			15DPSE 6351	10DPS 6351
63	53	12,5	4	60	62				10DPS 6353-1
65	53	20,5	4,2	61	64,4				10DPS 6553
70	58	20,5	4,2	66	69,4			15DPSE 7058	10DPS 7058
75	63	20,5	4,2	71	74,4			15DPSE 7563	10DPS 7563
80	65	20	5	76	78,5			15DPSE 8065-1	10DPS 8065-1
80	66	22,5	5,2	76	79,4			15DPSE 8066	10DPS 8066
85	71	22,5	5,2	81	84,4			15DPSE 8571	10DPS 8571
90	76	22,5	5,2	86	89,4			15DPSE 9076	10DPS 9076
100	85	20	5	96	98,5				10DPS 10085-1
100	86	22,5	5,2	96	99,4			15DPSE 10086	10DPS 10086
110	96	22,5	5,2	106	109,4			15DPSE 11096	10DPS 11096
115	101	22,5	5,2	111	114,4				10DPS 115101
120	106	22,5	5,2	116	119,4			15DPSE 120106	10DPS 120106
125	105	25	6,3	120	123				10DPS 125105-1
125	108	26,5	7,2	121	124,4			15DPSE 125108	10DPS 125108
140	120	25	6,3	135	138				10DPS 140120-1
140	123	26,5	7,2	136	139,4			15DPSE 140123	10DPS 140123
150	133	26,5	7,2	146	149,4				10DPS 150133
160	140	25	6,3	155	158			15DPSE 160140-1	10DPS 160140-1
160	143	26,5	7,2	156	159,4			15DPSE 160143	10DPS 160143
180	163	26,5	7,2	176	179,4			15DPSE 180163	10DPS 180163
200	180	31,5	9,2	196	199,4			15DPSE 200180	10DPS 200180
220	200	31,5	9,2	216	219,4			15DPSE 220200	10DPS 220200
250	230	31,5	9,2	246	249,4			15DPSE 250230	10DPS 250230



11DPS.../FPM-C is a double acting piston seal and guide element composed of a sealing rubber reinforced element and two guide rings. The dynamic side of the rubber part is fabric reinforced (fabric reinforced fluoro elastomer has a higher mechanical strength and better lubricating properties).

The section of the seal has been reduced to optimise its installation in closed grooves. The **11DPS.../FPM-C** is especially suitable for applications where there is contact with aggressive fuels and chemicals or at high temperature up to 150°C.

Operating conditions

✕ see page 8

Pressure	≤ 35 MPa
Temperature	-10°C to 150°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Seal ①	FPM8580/FPM8471-C
Guide rings ②	PTFE + bronze

Assembly

✕ see pages 54-59

- On one-piece pistons ①
- On two-piece pistons ②

Advantages

- Good sealing effect
- Compact groove dimensions
- Guiding and sealing are performed by the seal
- Low friction
- High chemical compatibility
- Up to 150°C

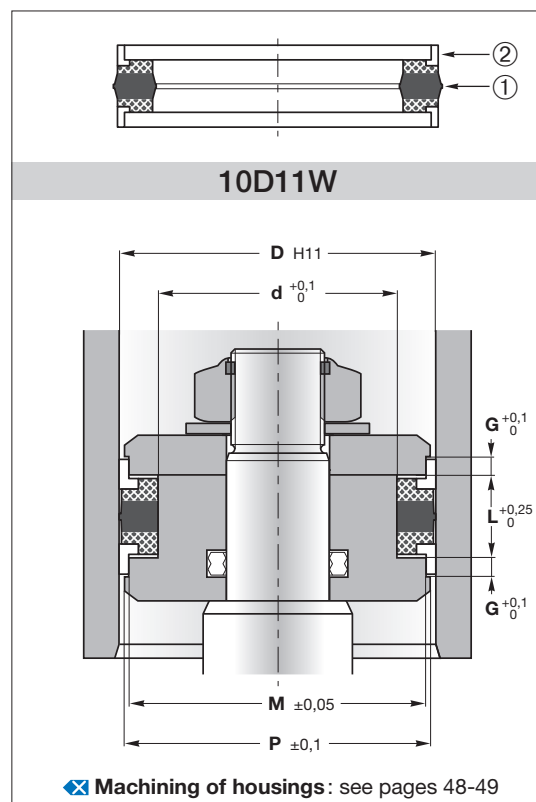
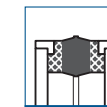
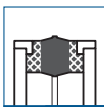
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

FPM seals

D	d	L	G	M	P	Reference
50	38	20,5	4,2	46	49,4	11DPS 5038 FPM-C
	40	12,5	4	47	49	11DPS 5040-1 FPM-C
60	48	20,5	4,2	56	59,4	11DPS 6048 FPM-C
63	51	20,5	4,2	59	62,4	11DPS 6351 FPM-C
80	65	20	5	76	78,5	11DPS 8065-1 FPM-C
	66	22,5	5,2	76	79,4	11DPS 8066 FPM-C
100	86	22,5	5,2	96	99,4	11DPS 10086 FPM-C
125	108	26,5	7,2	121	124,4	11DPS 125108 FPM-C
140	123	26,5	7,2	136	139,4	11DPS 140123 FPM-C



10D11W is a double acting seal and guide element composed of a sealing rubber reinforced element and two guide rings. It has been designed for a use on high pressure working split pistons.

The fabric reinforced part of the rubber is on both side of the seal. The guide rings are fitted on the outside diameter of the reinforcement and prevent extrusion into the gap.

The acetal resin guide rings also support the piston head under side load conditions thus **preventing metal to metal contact**. The rubber fabric allows a higher mechanical strength, reduce friction and wear.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Seal ①	N8T60/N8T60-C
Guide rings ②	PO0WC

Assembly

✕ see pages 54-59

On two-piece pistons

Advantages

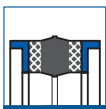
Efficient sealing at high and low pressure
High pressure
Good price-performance ratio
High resistance against extrusion

Please contact us for applications approaching maximum values.

More information

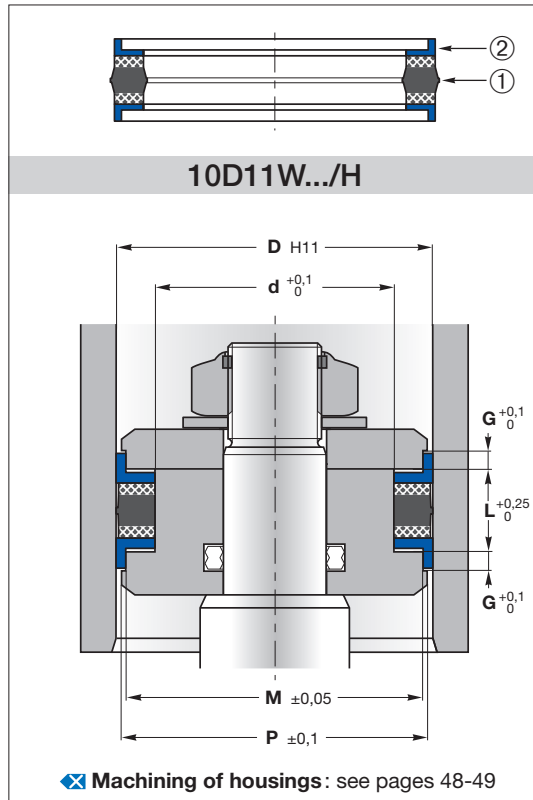
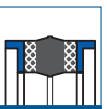
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	Alternative reference	Reference
38,1	25,4	16,27	6,35	34,54	37,05		10D11W 150100
44,45	28,57	19,05	6,35	39,87	43,14		10D11W 175112
50,8	34,92	19,45	6,35	46,22	49,5		10D11W 200137
53,97	38,1	19,05	6,35	49,37	52,68		10D11W 212150
57,15	41,27	19,45	6,35	52,55	55,8		10D11W 225162
60,32	44,45	19,05	6,35	55,72	58,38		10D11W 237175
63	47	19,4	6,35	58,4	61,65	15D11WE 6347	10D11W 248185
63,5	47,62	19,45	6,35	58,9	62,13		10D11W 250187
69,85	50,8	23,8	6,35	64,05	68,2		10D11W 275200
76,2	57,15	23,8	6,35	70,4	74,55		10D11W 300225
82,55	63,5	24,21	6,35	76,73	80,9		10D11W 325250
88,9	69,85	24,21	6,35	83,08	87,22		10D11W 350275
90	70	25,4	6,35	84,15	88,3		10D11W 354275/1
101,6	82,55	23,8	6,35	95,76	99,9		10D11W 400325
105	80	22,4	6,35	98,1	103		10D11W 413314
107,95	88,9	23,8	6,35	102,08	106,23		10D11W 425350
110	85	25,4	6,35	103,1	108		10D11W 433334
110	90	25,4	6,35	104,15	108,3	15D11WE 11090	10D11W 433354
114,3	88,9	32,15	6,35	107,42	112,33		10D11W 450350
115	90	22,4	6,35	108,1	113	15D11WE 11590	10D11W 452354
120,65	95,25	31,75	6,35	113,74	118,65		10D11W 475375
125	100	25,4	6,35	118,1	123		10D11W 492393
125	105	25,4	6,35	119,15	123,3		10D11W 492413
127	101,6	32,15	6,35	120,09	124,98		10D11W 500400
133,35	107,95	31,75	6,35	126,42	131,3		10D11W 525425
135	110	25,4	6,35	128,1	133		10D11W 531433
139,7	114,3	31,75	6,35	132,77	137,65		10D11W 550450
140	120	25,4	6,35	134,1	138,3		10D11W 551472
145	120	25,4	6,35	138,3	142,95		10D11W 570472
146,05	120,65	32,15	6,35	139,1	144		10D11W 575475
152,4	127	32,15	6,35	145,44	150,35		10D11W 600500
160	130	25,4	6,35	153	157,9	15D11WE 160130	10D11W 629511
165,1	139,7	32,15	6,35	158,12	163,01		10D11W 650550
177,8	152,4	31,75	6,35	170,8	175,7		10D11W 700600
180	150	35,4	6,35	172,95	177,87	15D11WE 180150	10D11W 708590
180	160	31,4	6,35	172,95	177,87		10D11W 708629
190	160	35,4	6,35	182,93	187,87	15D11WE 190160	10D11W 748629
200	170	35,4	6,35	192,96	197,84	15D11WE 200170	10D11W 787669
220	190	35,4	6,35	212,7	217,9	15D11WE 220190	10D11W 866748
250	220	35,4	6,35	242,9	247,86		10D11W 984866
300	270	35,4	6,35	292,9	297,86		10D11W 11811062



10D11W.../H

Fabric reinforced piston seal with guide rings



10D11W.../H is a double acting seal and guide element composed of a sealing rubber reinforced element and two guide rings. It has been designed for a use on high pressure working split pistons. The fabric reinforced part of the rubber is on both side of the seal.

10D11W.../H is characterised by the long sided L-profiles of the guide rings and prevent extrusion into the gap. The polyacetal bearing rings also support the piston head under side load conditions thus preventing metal to metal contact. The rubber fabric allows a higher mechanical strength, reduce friction and wear.

Operating conditions

✕ see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Seal ①	NBR with fabric reinforcement
Guide rings ②	Acetal resin

Assembly

✕ see pages 54-59

On two-piece pistons

Advantages

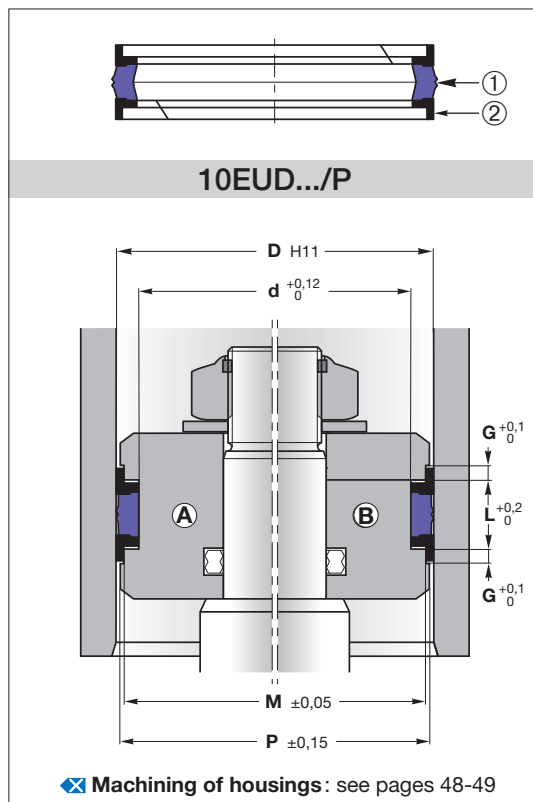
- Efficient sealing at high and low pressure
- High pressure
- Good price-performance ratio
- High resistance against extrusion

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	Reference
25	15	15,5	5	21,8	24	10D11W 098059/H
25,4	15,87	15,09	4,76	22,05	24,59	10D11W 100062/H
31,75	19,05	19,05	6,35	28,4	30,94	10D11W 125075/H
38,1	25,4	19,05	6,35	34,82	37,29	10D11W 150100/H
40	25	24	6	34,8	39	10D11W 157098/H
44,45	28,57	23,8	6,35	39,5	42,85	10D11W 175112/H
50	35	24	6	44,8	48,5	10D11W 196137/H
50,8	34,93	23,8	6,35	45,85	49,2	10D11W 200137/H
55	40	24	6	49,8	53,5	10D11W 216157/H
57,15	41,27	23,8	6,35	52,2	55,55	10D11W 225162/H
60	40	31	7	53,8	58,5	10D11W 236157/H
60,33	44,45	23,8	6,35	55,37	58,72	10D11W 237175/H
63	48	24	6	57,8	61,5	10D11W 248188/H
63,5	47,62	23,8	6,35	58,55	61,9	10D11W 250187/H
70	50	31	7	63,8	68	10D11W 275196/H
69,85	50,8	30,15	6,35	63,12	68,25	10D11W 275200/H
76,2	57,15	30,15	6,35	69,47	74,6	10D11W 300225/H
80	60	31	7	73,8	78	10D11W 314236/H
82,55	63,5	30,15	6,35	75,82	80,95	10D11W 325250/H
88,9	69,85	30,15	6,35	82,17	87,3	10D11W 350275/H
90	70	31	7	83,8	88	10D11W 354275/H
95,25	76,2	30,15	6,35	88,52	93,65	10D11W 375300/H
100	80	31	7	93,8	98	10D11W 393314/H
101,6	82,55	30,15	6,35	94,87	100	10D11W 400325/H
107,95	88,9	30,15	6,35	101,22	106,35	10D11W 425350/H
110	90	31	7	103,8	108	10D11W 433354/H
120	100	31	7	113,8	118	10D11W 472393/H
120,65	95,25	38,1	9,52	113,92	119,05	10D11W 475375/H
125	100	38	9,5	118,8	123	10D11W 492393/H
127	101,6	38,1	9,52	120,27	125,4	10D11W 500400/H
133,35	107,95	38,1	9,52	126,75	131,75	10D11W 525425/H
139,7	114,3	38,1	9,52	132,99	138,1	10D11W 550450/H
140	120	31	7	133,8	138	10D11W 551472/H
152,4	127	38,1	9,52	145,69	150,8	10D11W 600500/H
177,8	152,4	38,1	9,52	171,09	176,2	10D11W 700600/H



10EUD.../P is a double acting seal and guide element composed of a polyurethane sealing element in the middle and two guide ring. Back-up rings are unnecessary thanks to the high extrusion resistance of the polyurethane.

The **special shaped polyurethane ring** reduces the friction and extends the service life of the seal.

Operating conditions

✕ see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①	PU09
Guide rings ②	POM/GF1

Assembly

✕ see pages 54-59

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

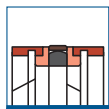
- Efficient sealing at high and low pressure
- Excellent abrasion resistance
- Extended service life
- Easy to assemble on monobloc pistons
- Small sections

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	ISO 7425	Reference
25	15 17	12,5 10	4 4	22 22	24 24	•	10EUD 2515/P 10EUD 2517/P
32	22 24	12,5 10	4 4	29 29	31 31	•	10EUD 3222/P 10EUD 3224/P
40	30 30 32	10 12,5 10	5 4 4	36,5 36 37	39 38 39	•	10EUD 4030/P 10EUD 4030/P1 10EUD 4032/P
50	35 40	20 12,5	5 4	46 47	48,5 49	•	10EUD 5035/P 10EUD 5040/P
55	45	12,5	4	52	54	•	10EUD 5545/P
63	48 53	20 12,5	5 4	59 60	62 62	•	10EUD 6348/P 10EUD 6353/P
70	55 60	20 12,5	5 4	66 67	68,5 69	•	10EUD 7055/P 10EUD 7060/P
80	65 70	20 12,5	5 4	76 77	78,5 79	•	10EUD 8065/P 10EUD 8070/P
90	75 80	20 12,5	5 5	86 86	88,5 88,5	•	10EUD 9075/P 10EUD 9080/P
100	85 90	20 12,5	5 5	96 96	98,5 98,5	•	10EUD 10085/P 10EUD 10090/P
110	95	20	5	106	108,5	•	10EUD 11095/P



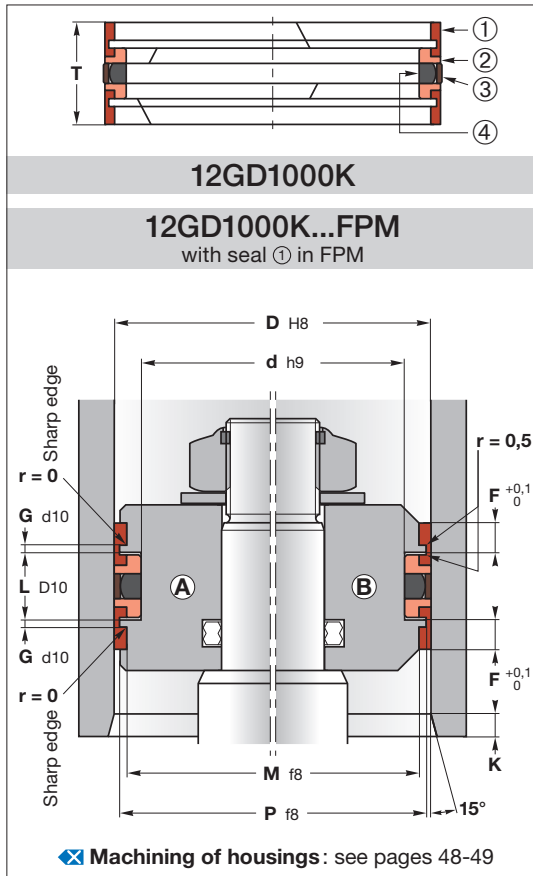
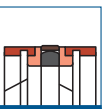
12GD1000K

Heavy duty piston seals

HUNGER
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SEALTECH
Hydraulic Seals Technology



More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

12GD1000K slide ring piston seal type is used to seal and guide pistons on double acting hydraulic cylinders. The seal design and materials used make it particularly suitable for the most vigorous applications e.g. construction machine cylinders.

The seal can be used in standard form with mineral oils and water base fluids. Modified versions are available for use with other fluids.

12GD1000K consists of 6 parts, a special shaped elastic ring of a modified NBR, a slide ring of abrasion resistant PTFE-Bronze compound which acts as the sealing ring, two lateral support rings of modified TPE and two bearing rings of pressure-resistant POM-PTFE-Bronze compound.

The elastic ring energises the slide ring to press it against the cylinder wall, providing a sealing function at zero working pressure. The onset of pressure compresses the elastic ring which increases the radial force pressing the slide ring against the cylinder wall, thereby **increasing the sealing effect**.

The two support rings prevent gap extrusion of the slide ring at **high pressures**. The special profile of the support rings encourages uniform fluid and pressure distribution to the elastic inner ring.

The bearing rings positioned on the support rings, make contact with the cylinder wall; there is **no metallic contact** between the piston and the cylinder tube.

Operating conditions

✕ see page 8

Pressure

Construction ① ≤ 63 MPa

Construction ② ≤ 36 MPa

Temperature

-30°C to 120°C

Speed

≤ 1 m/s

Fluids

✕ see pages 22-45

Materials

✕ see pages 10-19

Guide rings ①

POM-PTFE bronze compound

FPM: other operating conditions

Anti-extrusion rings ②

Ø 40 to 180 mm

TPE

> Ø 180 mm

POM or PA

Dynamic sealing element ③

PTFE-bronze

Energising element ④

NBR

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

Efficient sealing at low and high pressures

Compact seal

Easy installation on monobloc pistons

Excellent abrasion resistance

Guiding and sealing are performed by the seal

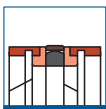
Please contact us for applications approaching maximum values.

D	d	L	T	M	P	G	F	K	HUNGER reference	Reference
40	26	15,5	32	32	36	3,5	8,25	7	137690	12GD1000K 40
45	31	15,5	32	37	41	3	8,25	7	137691	12GD1000K 45
50	34	20,5	32	42	46	3	5,8	7	021900	12GD1000K 50/1
	34	20,5	39	42	46	3	9,25	7	137692	12GD1000K 50
56	40	20,5	39	48	52	3	9,25	7	137693	12GD1000K 56
60	44	20,5	39	52	56	3	9,25	7	039730	12GD1000K 60
63	47	20,5	32	55	59	3	5,8	7	021901	12GD1000K 63/1
	47	20,5	39	55	59	3	9,25	7	137694	12GD1000K 63
65	49	20,5	39	57	61	3	9,25	7	137695	12GD1000K 65
70	54	20,5	32	62	66	3	5,8	7	021902	12GD1000K 70/1
	54	20,5	39	62	66	3	9,25	7	137696	12GD1000K 70
75	59	20,5	39	67	71	3	9,25	7	137697	12GD1000K 75
80	62	22,5	36	72	76	3	6,8	7	021903	12GD1000K 80/1
	62	22,5	43	72	76	3	10,25	7	137698	12GD1000K 80
85	67	22,5	43	77	81	3	10,25	7	137699	12GD1000K 85
90	72	22,5	36	82	86	3	6,8	7	021904	12GD1000K 90/1
	72	22,5	43	82	86	3	10,25	7	137700	12GD1000K 90
95	77	22,5	43	87	91	3	10,25	7	137701	12GD1000K 95
100	82	22,5	36	92	96	3	6,8	7	021905	12GD1000K 100/1
	82	22,5	43	92	96	3	10,25	7	137702	12GD1000K 100
105	87	22,5	36	97	101	3	6,8	10	039216	12GD1000K 105/1
105	87	22,5	43	97	101	3	10,25	10	137703	12GD1000K 105
110	92	22,5	36	102	106	3	6,8	10	021906	12GD1000K 110/1
	92	22,5	43	102	106	3	10,25	10	137704	12GD1000K 110
115	97	22,5	36	107	111	3	6,8	10	021907	12GD1000K 115/1
	97	22,5	43	107	111	3	10,25	10	137705	12GD1000K 115
120	102	22,5	36	112	116	3	6,8	10	021908	12GD1000K 120/1
120	102	22,5	43	112	116	3	10,25	10	137706	12GD1000K 120
125	103	26,5	43	115	121	4	8,3	10	021909	12GD1000K 125/1
	103	26,5	53	115	121	4	13,25	10	137707	12GD1000K 125
130	108	26,5	43	120	126	4	8,3	10	021910	12GD1000K 130/1
	108	26,5	53	120	126	4	13,25	10	137708	12GD1000K 130
135	113	26,5	43	125	131	4	8,3	10	037422	12GD1000K 135/1
140	118	26,5	43	130	136	4	8,3	10	021911	12GD1000K 140/1
	118	26,5	53	130	136	4	13,25	10	137710	12GD1000K 140

Further dimensions on request

12GD1000K seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.

For prices and availability: www.sealtech-business.be



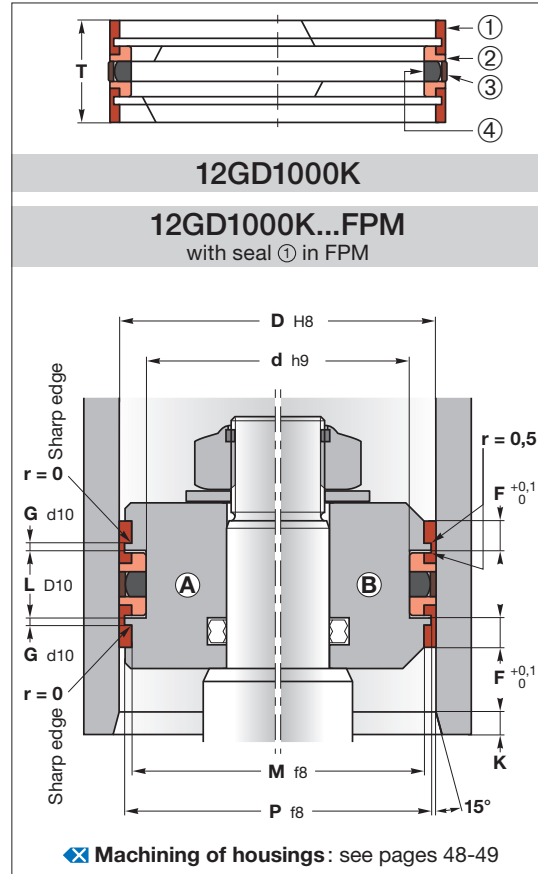
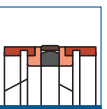
12GD1000K

Heavy duty piston seals

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More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

12GD1000K slide ring piston seal type is used to seal and guide pistons on double acting hydraulic cylinders. The seal design and materials used make it particularly suitable for the most vigorous applications e.g. construction machine cylinders.

The seal can be used in standard form with mineral oils and water base fluids. Modified versions are available for use with other fluids.

12GD1000K consists of 6 parts, a special shaped elastic ring of a modified NBR, a slide ring of abrasion resistant PTFE-Bronze compound which acts as the sealing ring, two lateral support rings of modified TPE and two bearing rings of pressure-resistant POM-PTFE-Bronze compound.

The elastic ring energises the slide ring to press it against the cylinder wall, providing a sealing function at zero working pressure. The onset of pressure compresses the elastic ring which increases the radial force pressing the slide ring against the cylinder wall, thereby **increasing the sealing effect**.

The two support rings prevent gap extrusion of the slide ring at **high pressures**. The special profile of the support rings encourages uniform fluid and pressure distribution to the elastic inner ring.

The bearing rings positioned on the support rings, make contact with the cylinder wall; there is **no metallic contact** between the piston and the cylinder tube.

Operating conditions

✕ see page 8

Pressure	
Construction ①	≤ 63 MPa
Construction ②	≤ 36 MPa
Temperature	-30°C to 120°C
Speed	≤ 1 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Guide rings ①	POM-PTFE bronze compound
	FPM: other operating conditions
Anti-extrusion rings ②	
Ø 40 to 180 mm	TPE
> Ø 180 mm	POM or PA
Dynamic sealing element ③	PTFE-bronze
Energising element ④	NBR

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

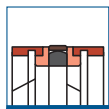
- Efficient sealing at low and high pressures
- Compact seal
- Easy installation on monobloc pistons
- Excellent abrasion resistance
- Guiding and sealing are performed by the seal

Please contact us for applications approaching maximum values.

D	d	L	T	M	P	G	F	K	HUNGER reference	Reference
150	128	26,5	43	140	146	4	8,3	10	021912	12GD1000K 150/1
	128	26,5	53	140	146	4	13,25	10	137712	12GD1000K 150
160	138	26,5	43	150	156	4	8,3	10	021913	12GD1000K 160/1
	138	26,5	53	150	156	4	13,25	10	137714	12GD1000K 160
165	143	26,5	57	155	161	6	15,25	10	070791	12GD1000K 165
170	148	26,5	57	160	166	6	15,25	10	137715	12GD1000K 170
175	153	26,5	57	165	171	6	15,25	10	076259	12GD1000K 175
180	158	26,5	48	170	176	6	10,8	10	021915	12GD1000K 180/1
	158	26,5	57	170	176	6	15,25	10	137716	12GD1000K 180
190	165	31,5	48	180	186	4,5	8,3	10	038159	12GD1000K 190/1
	155	31,5	64	180	186	4,5	16,25	10	137717	12GD1000K 190
195	155	31,5	48	185	191	4,5	8,3	10	036968	12GD1000K 195/1
200	175	31,5	48	190	196	4,5	8,3	10	021916	12GD1000K 200/1
	175	31,5	64	190	196	4,5	16,25	10	137718	12GD1000K 200
210	185	31,5	58	200	206	8	13,3	12	021917	12GD1000K 210/1
	185	31,5	71	200	206	8	19,75	12	137719	12GD1000K 210
220	195	31,5	58	210	216	8	13,3	12	021918	12GD1000K 220/1
	195	31,5	71	210	216	8	19,75	12	137720	12GD1000K 220
225	200	31,5	51	215	221	8	13,3	12	021919	12GD1000K 225/1
	200	31,5	71	215	221	8	19,75	12	137721	12GD1000K 225
230	205	31,5	85	220	226	15	26,75	12	137722	12GD1000K 230
235	210	31,5	74	225	231	15	21,3	12	036969	12GD1000K 235/1
	210	31,5	85	225	231	15	26,75	12	137723	12GD1000K 235
240	215	31,5	74	230	236	15	21,3	12	038356	12GD1000K 240/1
	215	31,5	85	230	236	15	26,75	12	137724	12GD1000K 240
245	220	31,5	85	235	251	15	26,75	12	070630	12GD1000K 245
250	225	31,5	74	240	246	15	21,3	12	021921	12GD1000K 250/1
	225	31,5	85	240	246	15	26,75	12	137725	12GD1000K 250
260	235	31,5	85	250	256	15	26,75	12	039464	12GD1000K 260
275	250	31,5	74	265	271	15	21,3	12	036970	12GD1000K 275/1
	250	31,5	85	265	271	15	26,75	12	137727	12GD1000K 275
280	255	31,5	74	270	276	15	21,3	12	023168	12GD1000K 280/1
	255	31,5	85	270	276	15	26,75	12	137728	12GD1000K 280
285	260	31,5	85	275	281	15	26,75	12	072809	12GD1000K 285
290	265	31,5	85	280	286	15	26,75	12	137729	12GD1000K 290

Further dimensions on request

12GD1000K seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



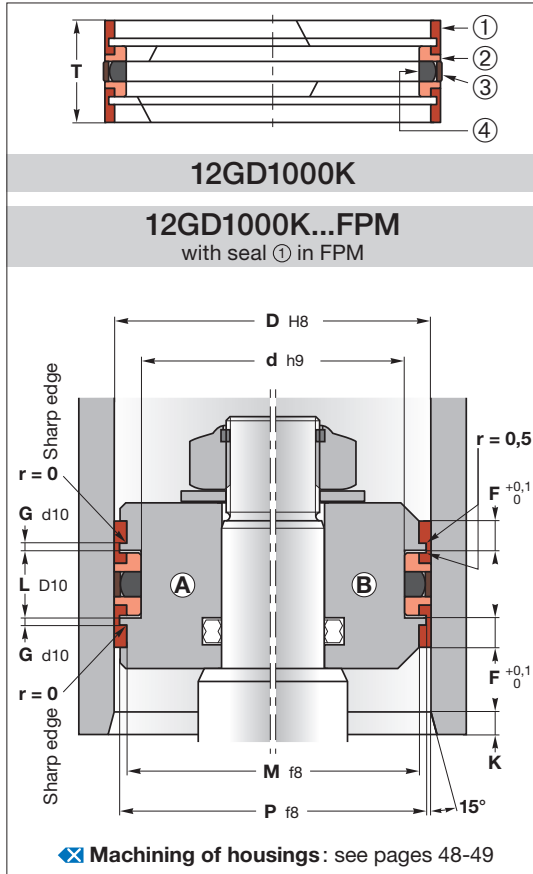
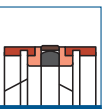
12GD1000K

Heavy duty piston seals

HUNGER
Dichtungen



SEALTECH
Hydraulic Seals Technology



More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

12GD1000K slide ring piston seal type is used to seal and guide pistons on double acting hydraulic cylinders. The seal design and materials used make it particularly suitable for the most vigorous applications e.g. construction machine cylinders.

The seal can be used in standard form with mineral oils and water base fluids. Modified versions are available for use with other fluids.

12GD1000K consists of 6 parts, a special shaped elastic ring of a modified NBR, a slide ring of abrasion resistant PTFE-Bronze compound which acts as the sealing ring, two lateral support rings of modified TPE and two bearing rings of pressure-resistant POM-PTFE-Bronze compound.

The elastic ring energises the slide ring to press it against the cylinder wall, providing a sealing function at zero working pressure. The onset of pressure compresses the elastic ring which increases the radial force pressing the slide ring against the cylinder wall, thereby **increasing the sealing effect**.

The two support rings prevent gap extrusion of the slide ring at **high pressures**. The special profile of the support rings encourages uniform fluid and pressure distribution to the elastic inner ring.

The bearing rings positioned on the support rings, make contact with the cylinder wall; there is **no metallic contact** between the piston and the cylinder tube.

Operating conditions

✕ see page 8

Pressure

Construction ① ≤ 63 MPa

Construction ② ≤ 36 MPa

Temperature

-30°C to 120°C

Speed

≤ 1 m/s

Fluids

✕ see pages 22-45

Materials

✕ see pages 10-19

Guide rings ①

POM-PTFE bronze compound

FPM: other operating conditions

Anti-extrusion rings ②

Ø 40 to 180 mm

TPE

> Ø 180 mm

POM or PA

Dynamic sealing element ③

PTFE-bronze

Energising element ④

NBR

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

Efficient sealing at low and high pressures

Compact seal

Easy installation on monobloc pistons

Excellent abrasion resistance

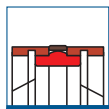
Guiding and sealing are performed by the seal

Please contact us for applications approaching maximum values.

D	d	L	T	M	P	G	F	K	HUNGER reference	Reference
300	275 275	31,5 31,5	74 85	290 290	296 296	15 15	21,3 26,75	12 12	024305 137730	12GD1000K 300/1 12GD1000K 300
310	280	36,5	80	298	304	8,5	21,75	15	137731	12GD1000K 310
320	290	36,5	80	308	314	8,5	21,75	15	137732	12GD1000K 320
330	300	36,5	80	318	324	8,5	21,75	15	036971	12GD1000K 330
340	310	36,5	80	328	334	8,5	21,75	15	137733	12GD1000K 340
350	320	36,5	80	338	344	8,5	21,75	15	137734	12GD1000K 350
360	330	36,5	80	348	354	8,5	21,75	15	137735	12GD1000K 360
380	350	36,5	80	368	374	8,5	21,75	15	137736	12GD1000K 380
400	370 370	36,5 36,5	80 80	388 388	394 394	8,5 8,5	21,75 21,75	15 15	137737 415798	12GD1000K 400 12GD1000K 400 FPM
420	390	36,5	80	408	414	8,5	21,75	15	137738	12GD1000K 420
425	395	36,5	80	413	419	8,5	21,75	15	137739	12GD1000K 425
440	410	36,5	80	428	434	8,5	21,75	15	024903	12GD1000K 440
450	420	36,5	80	438	444	8,5	21,75	15	137740	12GD1000K 450
480	450	36,5	80	468	474	8,5	21,75	15	137741	12GD1000K 480
500	470	36,5	80	488	494	8,5	21,75	15	137742	12GD1000K 500
560	530	36,5	80	548	554	8,5	21,75	15	137743	12GD1000K 560
570	540	36,5	80	558	564	8,5	21,75	15	070355	12GD1000K 570
580	550	36,5	80	568	574	8,5	21,75	15	037072	12GD1000K 580
590	560	36,5	80	578	584	8,5	21,75	15	402391	12GD1000K 590
600	570	36,5	80	588	594	8,5	21,75	15	137744	12GD1000K 600
630	600	36,5	80	618	624	8,5	21,75	15	137745	12GD1000K 630
650	620	36,5	80	638	644	8,5	21,75	15	137746	12GD1000K 650
700	670	36,5	80	688	694	8,5	21,75	15	137747	12GD1000K 700
750	720	36,5	80	738	744	8,5	21,75	15	137748	12GD1000K 750
780	750	36,5	80	768	774	8,5	21,75	15	137749	12GD1000K 780
800	770	36,5	80	788	794	8,5	21,75	15	137750	12GD1000K 800

Further dimensions on request

12GD1000K seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



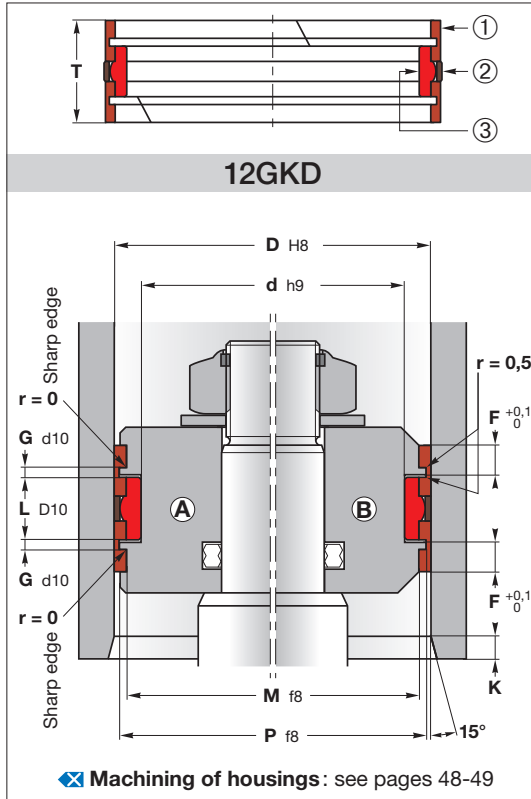
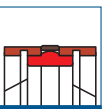
12GKD

Heavy duty piston seals

HUNGER
Dichtungen



SEALTECH
Hydraulic Seals Technology



12GKD compact slide ring seal type is used to seal and guide pistons on double acting hydraulic cylinders (in standard form it is suitable for use with all mineral oils).

12GKD consists of 4 parts, an elastic inner ring of PUR, a slide ring of abrasion-resistant PTFE-Bronze compound and two bearing rings of a pressure-resistant POM-PTFE-Bronze compound.

The guide rings make contact with the cylinder wall; there is no metallic contact between the piston and the cylinder body.

The internal elastic ring energises the slide ring to press it against the cylinder wall providing a sealing function at zero pressure. The onset of pressure compresses the elastic ring increasing the radial forces acting on the slide ring, thereby **increasing the sealing effect**.

Like the slide ring, the two bearing rings also sit on the elastic ring. The pressure-induced compression of the internal ring forces the two bearing rings, and the slide ring, against the cylinder wall so that there is **zero clearance** between bearing rings and cylinder wall. Even if the cylinder tube expands under pressure, the seal will adapt to the radial deformation maintaining both zero gap and the sealing function.

Operating conditions

✕ see page 8

Pressure

Construction (A)

≤ 63 MPa

Construction (B)

≤ 36 MPa

Temperature

-35°C to 100°C

Speed

≤ 1 m/s

Fluids

✕ see pages 22-45

Materials

✕ see pages 10-19

Guide rings ①

POM-PTFE bronze compound

Dynamic sealing element ②

PTFE-bronze

Energising element ③

PU

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

- Efficient sealing at low and high pressures
- Compact seal : no loss of space
- Low friction
- Easy installation on monobloc pistons
- Guiding and sealing are performed by the seal
- Excellent abrasion resistance

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	T	M	P	G	F	K	HUNGER reference	Reference
40	26	15,5	30	32	36	3,5	7,25	7	010502	12GKD 40/1
45	31	15,5	30	37	41	3	7,25	7	010506	12GKD 45/1
50	34	20,5	32	42	46	3	5,8	7	010508	12GKD 50/1
63	47	20,5	32	55	59	3	5,8	7	010512	12GKD 63/1
70	54	20,5	32	62	66	3	5,8	7	010514	12GKD 70/1
80	62	22,5	36	72	76	3	6,8	7	010517	12GKD 80/1
90	72	22,5	36	82	86	3	6,8	7	010520	12GKD 90/1
100	82	22,5	36	92	96	3	6,8	7	010522	12GKD 100/1
110	92	22,5	36	102	106	3	6,8	10	010524	12GKD 110/1
120	102	22,5	36	112	116	3	6,8	10	010526	12GKD 120/1
125	103	26,5	43	115	121	4	8,3	10	010527	12GKD 125/1
140	118	26,5	43	130	136	4	8,3	10	010530	12GKD 140/1
155	133	26,5	43	145	151	4	8,3	10	010533	12GKD 155/1
160	138	26,5	43	150	156	4	8,3	10	010534	12GKD 160/1
180	158	26,5	48	170	176	6	10,8	10	010537	12GKD 180/1
195	170	31,5	48	185	191	4,5	8,3	10	019704	12GKD 195/1
200	175	31,5	48	190	196	4,5	8,3	10	010540	12GKD 200/1
210	185	31,5	58	200	206	8	13,3	12	010541	12GKD 210/1
220	195	31,5	58	210	216	8	13,3	12	010542	12GKD 220/1
235	210	31,5	74	225	231	15	21,3	12	010544	12GKD 235/1
240	215	31,5	74	230	236	15	21,3	12	010545	12GKD 240/1
250	225	31,5	74	240	246	15	21,3	12	010547	12GKD 250/1
280	255	31,5	74	270	276	15	21,3	12	010552	12GKD 280/1

Further dimensions on request

12GKD seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10DC is a single acting piston seal primarily used on piston heads, plungers or rams in hydraulic or pneumatic and designed for split pistons.

Piston cups are recommended to handle **low pressures** in air, water, hydraulic fluids, and lubricating oils.

Piston cups are commonly used because of economical cost, efficient assemble, universal acceptance, and simple accessories.

Operating conditions see page 8

Pressure	≤ 4 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,25 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal	NBR8090
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Assembly see pages 54-59

On multi-piece pistons

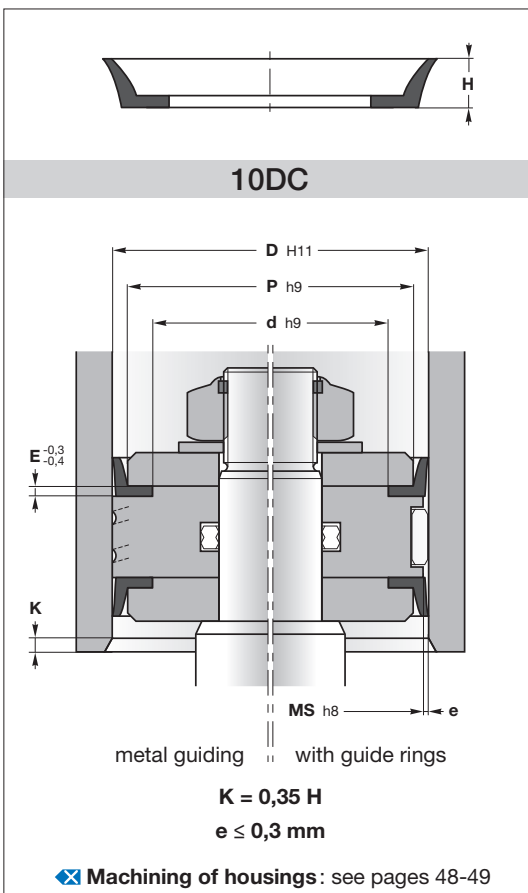
Advantages

- Low friction
- Easy to assemble
- Good price-performance ratio

Please contact us for applications approaching maximum values.

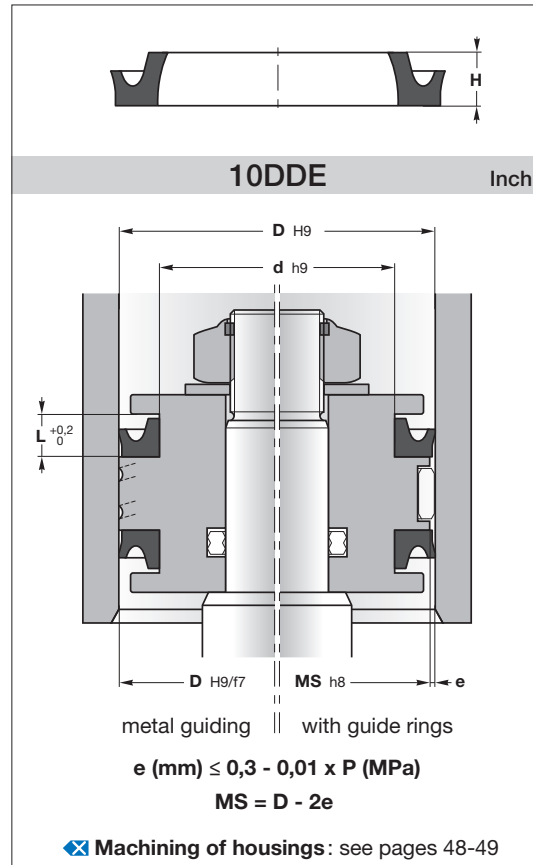
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.



D	d	H	E	P	Reference
11,11	3,96	6,37	2,38	6,74	10DC 043
12,7	6,35	4,78	2,38	8,33	10DC 050
15,87	5,55	6,35	2,38	11,11	10DC 062
19,05	6,35	4,76	2,38	13,89	10DC 075
25,4	11,11	6,35	2,38	19,05	10DC 100
30,16	11,11	7,93	2,38	20,63	10DC 118
31,75	11,11	6,35	2,38	23,01	10DC 125
34,93	9,52	6,35	3,17	25,4	10DC 137
36,51	9,52	9,52	3,17	26,99	10DC 143
38,1	15,87	9,52	3,17	28,58	10DC 150
41,28	12,7	9,52	3,17	31,75	10DC 162
44,45	15,87	9,52	3,17	34,93	10DC 175
50,8	22,22	9,52	3,17	41,28	10DC 200
53,98	22,22	9,52	3,17	44,2	10DC 212
57,15	22,22	9,52	3,96	47,63	10DC 225
60,33	19,05	9,52	3,96	50,8	10DC 237
63,5	22,22	9,52	3,96	53,98	10DC 250
69,85	12,7	12,7	3,17	60,33	10DC 275
76,2	25,4	12,7	4,76	66,68	10DC 300
82,55	28,58	12,7	3,96	73,03	10DC 325
88,9	55,56	12,7	3,17	79,38	10DC 350

D	d	H	E	P	Reference
95,25	30,16	15,87	3,17	84,14	10DC 375
101,6	19,05	12,7	4,76	92,08	10DC 400
107,95	30,16	15,87	3,17	98,43	10DC 425
114,3	76,2	9,52	3,17	104,8	10DC 450
120,65	60,33	15,87	4,76	109,5	10DC 475
127	76,2	12,7	3,17	117,5	10DC 500
133,35	95,25	12,7	4,76	120,7	10DC 525
139,7	101,6	15,87	6,35	127	10DC 550
146,05	107,95	15,87	6,35	133,4	10DC 575
152,4	114,3	9,52	3,17	142,9	10DC 600
158,75	122,22	15,87	3,17	146,1	10DC 625
165,1	149,2	9,52	3,17	155,6	10DC 650
171,45	127	15,87	6,35	158,8	10DC 675
177,8	101,6	12,7	4,76	166,7	10DC 700
184,15	133,35	15,87	6,35	171,5	10DC 725
203,2	127	12,7	4,76	193,7	10DC 800
228,6	152,4	15,87	4,76	215,9	10DC 900
254	209,55	15,87	3,96	241,3	10DC 1000
304,8	231,8	15,87	3,96	292,1	10DC 1200
355,6	279,4	19,05	6,35	330,2	10DC 1400
406,4	339,73	19,05	3,96	387,4	10DC 1600



10DDE single acting piston seal can be used in hydraulic or pneumatic cylinders.

This NBR profile is designed with a shorter outer sealing lip which ensures low friction and pushes the load against the cylinder tube.

NB: The seal diameters are smaller than the metallic one, but once assembled the seal shows good sealing efficiency.

Operating conditions

✕ see page 8

Pressure	≤ 8 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Seal	NBR8075
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Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

- Easy installation on monobloc pistons
- Low friction
- Good price-performance ratio
- Small housing

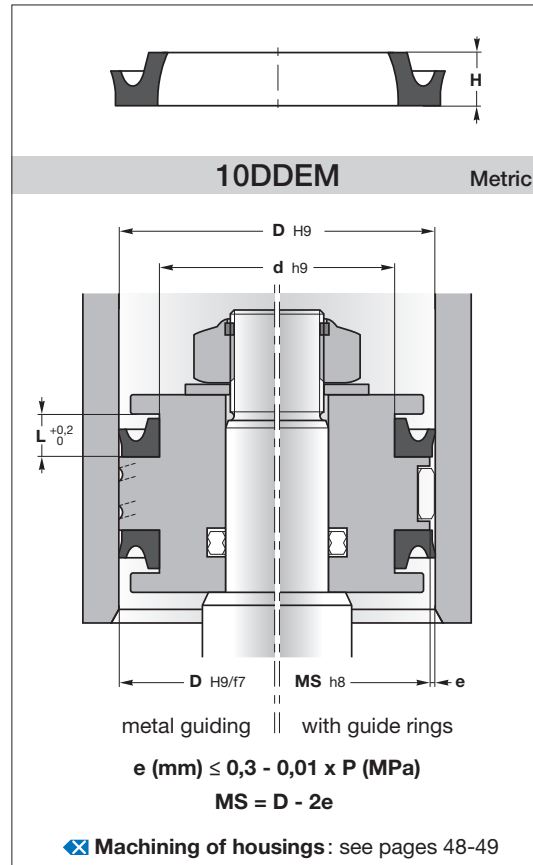
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

D	d	L	H	Reference
13	6,7	6,3	4,76	10DDE 050
16	8,1	7	5,55	10DDE 062
19,05	12,7	5	3,17	10DDE 075
25,4	16,5	8	6,35	10DDE 100
27	17,5	8	6,35	10DDE 106
29	19,05	8	6,35	10DDE 112
32	19,3	8	6,35	10DDE 125
35	22,3	8	6,35	10DDE 137
37	26	8	6,35	10DDE 143
38	30	8	6,35	10DDE 150
38,1	25,4	9,52	7,92	10DDE 150100
40	27,3	8	6,35	10DDE 156
42	30,9	8	6,35	10DDE 162
45	35,5	8,5	7	10DDE 175
44,45	28,57	11,1	9,52	10DDE 175112
48	32,1	9,5	7,93	10DDE 187
49	35	11	9,52	10DDE 193
51	41,5	9	7,14	10DDE 200
54	41,3	11	9,52	10DDE 212
53,97	38,1	11,1	9,52	10DDE 212150
57	44,3	8	6,35	10DDE 225
57,15	41,27	11,1	9,52	10DDE 225162
61	48,3	8	6,35	10DDE 237
64	46,3	10,5	8,85	10DDE 250
63,5	47,62	11,1	9,52	10DDE 250187
70	54,1	9,5	7,93	10DDE 275
76	57,9	10,5	8,73	10DDE 300

D	d	L	H	Reference
76,2	57,15	14,3	12,7	10DDE 300225
80	67,3	8	6,35	10DDE 312
83	71,9	8,5	7,5	10DDE 325
82,55	63,5	14,3	12,7	10DDE 325250
86	73,3	11	9,52	10DDE 337
89	76,3	8	6,35	10DDE 350
95	76,7	9	7,4	10DDE 375
95,25	76,2	14,3	12,7	10DDE 375300
99	86,3	11	9,52	10DDE 387
102	89,3	11	9,52	10DDE 400
108	95,3	9,5	7,93	10DDE 425
111	94,7	9,5	7,93	10DDE 437
115	89,6	19	15,9	10DDE 450350
118	105,3	11	9,52	10DDE 462
121	108,3	11	9,52	10DDE 475
127	108	11	9,52	10DDE 500
127	101,6	17,45	15,87	10DDE 500400
130	117,3	11	9,52	10DDE 512
134	121,3	11	9,52	10DDE 525
149	136,3	11	9,52	10DDE 587
153	127,6	19	15,9	10DDE 600500
159	133,6	19	15,9	10DDE 625525
165	139,6	19	15,9	10DDE 650550
172	153	12,5	11,1	10DDE 675
191	159,3	22	19	10DDE 700625
204	172,3	22	19	10DDE 800675
210	178,3	22	19	10DDE 825700
254	235	14,5	12,7	10DDE 1000
254	222,25	20,62	19,05	10DDE 1000875
305	279,6	14,5	12,7	10DDE 1200



10DDem single acting piston seal can be used in hydraulic or pneumatic cylinders.

This NBR profile is designed with a shorter outer sealing lip which ensures **low friction** and pushes the load against the cylinder tube.

Operating conditions ✕ see page 8

Pressure	$\leq 8 \text{ MPa}$
Temperature	-30°C to 100°C
Speed	$\leq 0,5 \text{ m/s}$
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Seal	NBR8490 (90 Sh A) NBR8075 (75 Sh A)
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Assembly ✕ see pages 54-59

On one-piece pistons

Advantages

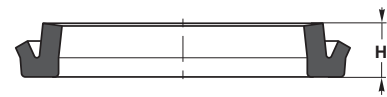
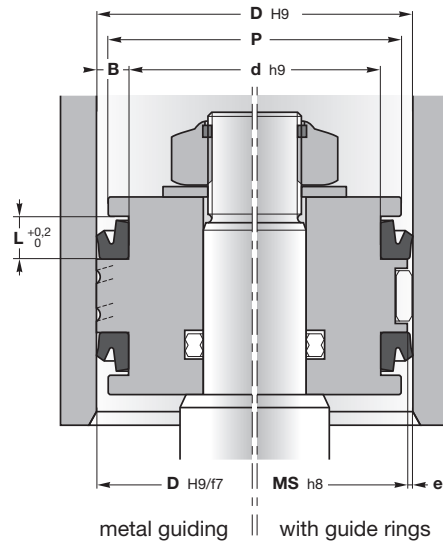
- Easy installation on monobloc pistons
- Low friction
- Good price-performance ratio
- Small housing

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	H	Reference
12	6	4,5	4	10DDem 1206
16	10	4,5	4	10DDem 1610
20	12	6	5,5	10DDem 2012
25	17	6	5,5	10DDem 2517
32	24	6	5,5	10DDem 3224
40	30	7,5	7	10DDem 4030
50	40	7,5	7	10DDem 5040
55	45	7,5	7	10DDem 5545
60	50	7,5	7	10DDem 6050
63	53	7,5	7	10DDem 6353
65	55	7,5	7	10DDem 6555
70	58	9,5	8,5	10DDem 7058
75	63	9,5	8,5	10DDem 7563
80	68	9,5	8,5	10DDem 8068
85	73	9,5	8,5	10DDem 8573
90	78	9,5	8,5	10DDem 9078
100	88	9,5	8,5	10DDem 100088
105	93	9,5	8,5	10DDem 105093
110	98	9,5	8,5	10DDem 110098
120	105	11	10	10DDem 120105
125	110	11	10	10DDem 125110
140	125	11	10	10DDem 140125
145	130	11	10	10DDem 145130
150	135	11	10	10DDem 150135
160	145	11	10	10DDem 160145
180	160	15	14	10DDem 180160
200	180	15	14	10DDem 200180
220	200	15	14	10DDem 220200
250	230	15	14	10DDem 250230

**10DDEM.../C**

$$P = d + 1,7 B$$

$$e \text{ (mm)} \leq 0,3 - 0,01 \times P \text{ (MPa)}$$

$$MS = D - 2e$$

Machining of housings: see pages 48-49

10DDEM.../C single acting piston seal can be used in hydraulic or pneumatic cylinders.

This NBR profile is designed with a shorter outer sealing lip which ensures **low friction** and pushes the load against the cylinder tube.

Operating conditions

see page 8

Pressure	≤ 12 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials

see pages 10-19

Seal	NBR6280
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Assembly

see pages 54-59

On one-piece pistons

Advantages

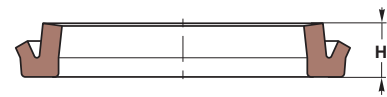
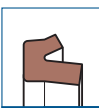
- Easy installation on monobloc pistons
- Low friction
- Good price-performance ratio
- Small housing

Please contact us for applications approaching maximum values.

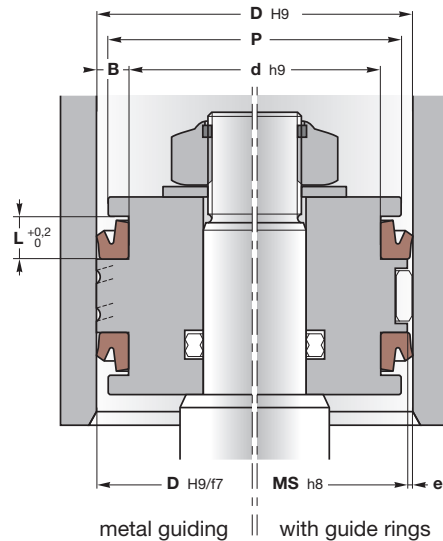
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

D	d	L	H	Reference
20	12	6	5,5	10DDEM 2012/C
25	17	6	5,5	10DDEM 2517/C
32	24	6	5,5	10DDEM 3224/C
40	30	7,5	7	10DDEM 4030/C
50	40	7,5	7	10DDEM 5040/C
60	48	8	7,5	10DDEM 6048/C
60	50	7,5	7	10DDEM 6050/C
63	53	7,5	7	10DDEM 6353/C
70	58	9,5	8,5	10DDEM 7058/C
80	68	9,5	8,5	10DDEM 8068/C
90	78	9,5	8,5	10DDEM 9078/C
100	88	9,5	8,5	10DDEM 10088/C
110	95	11	10	10DDEM 11095/C
125	110	11	10	10DDEM 125110/C
140	125	11	10	10DDEM 140125/C
150	135	11	10	10DDEM 150135/C
160	145	11	10	10DDEM 160145/C
200	180	15	14	10DDEM 200180/C



11DDEM.../C FPM



$$P = d + 1,7 B$$

$$e \text{ (mm)} \leq 0,3 - 0,01 \times P \text{ (MPa)}$$

$$MS = D - 2e$$

✕ Machining of housings: see pages 48-49

11DDEM.../C FPM single acting piston seal can be used in hydraulic or pneumatic cylinders. This FPM profile is designed with a shorter outer sealing lip which ensures low friction and pushes the load against the cylinder tube.

11DDEM.../C FPM is especially suitable for applications where there is contact with aggressive fuels and chemicals or at high temperature up to 200°C.

Operating conditions

✕ see page 8

Pressure	≤ 12 MPa
Temperature	-10°C to 200°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Seal	FPM6282
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Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

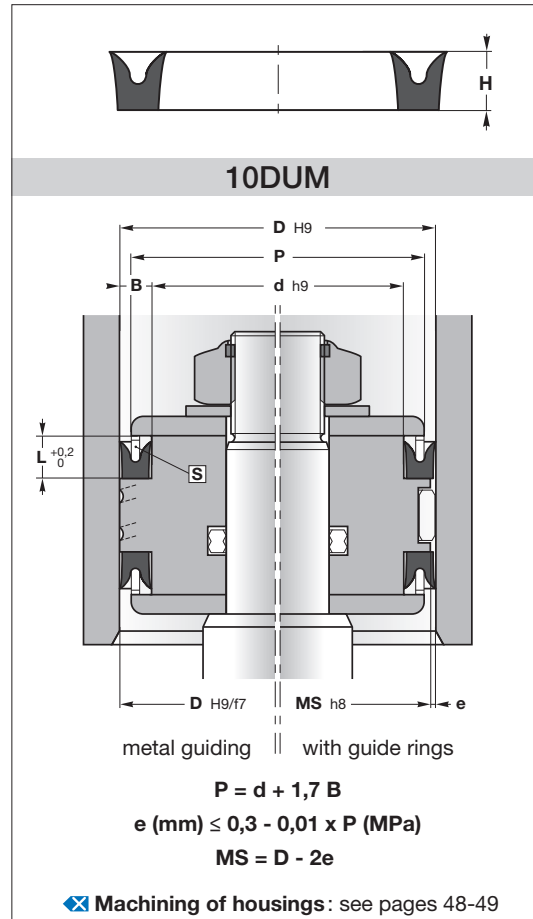
- Easy installation on monobloc pistons
- Low friction
- Good price-performance ratio
- Small housing
- High chemical compatibility
- Large temperature range

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

D	d	L	H	Reference
20	12	6	5,5	11DDEM 2012/C FPM
25	17	6	5,5	11DDEM 2517/C FPM
32	24	6	5,5	11DDEM 3224/C FPM
40	30	7,5	7	11DDEM 4030/C FPM
50	40	7,5	7	11DDEM 5040/C FPM
60	50	7,5	7	11DDEM 6050/C FPM
63	53	7,5	7	11DDEM 6353/C FPM
80	68	9,5	8,5	11DDEM 8068/C FPM
100	88	9,5	8,5	11DDEM 100088/C FPM
125	110	11	10	11DDEM 125110/C FPM
150	135	11	10	11DDEM 150135/C FPM
160	145	11	10	11DDEM 160145/C FPM
200	180	15	14	11DDEM 200180/C FPM



10DUM is a symmetrical U-ring with sharp sealing lips. In this case, the sealing edges aren't below the seal height, therefore this profile has to be used with a header ring. The header ring can be made in metal, plastic or in rubber. This profile is primarily used as piston seal, but it can also be used as rod seal.

10DUM is also suitable for pneumatic applications.

Operating conditions [X](#) see page 8

Pressure	≤ 10 MPa
Temperature	-15°C to 120°C
Speed	≤ 0,5 m/s
Fluids	X see pages 22-45

Materials [X](#) see pages 10-19

Seal	NBR8090
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Assembly [X](#) see pages 54-59

On multi-piece pistons

With profiles 10DU and 10DUM a header ring S must be mounted with the seal

Advantages

- Low friction
- Good price-performance ratio
- Suitable for rods and pistons

Please contact us for applications approaching maximum values.

More information

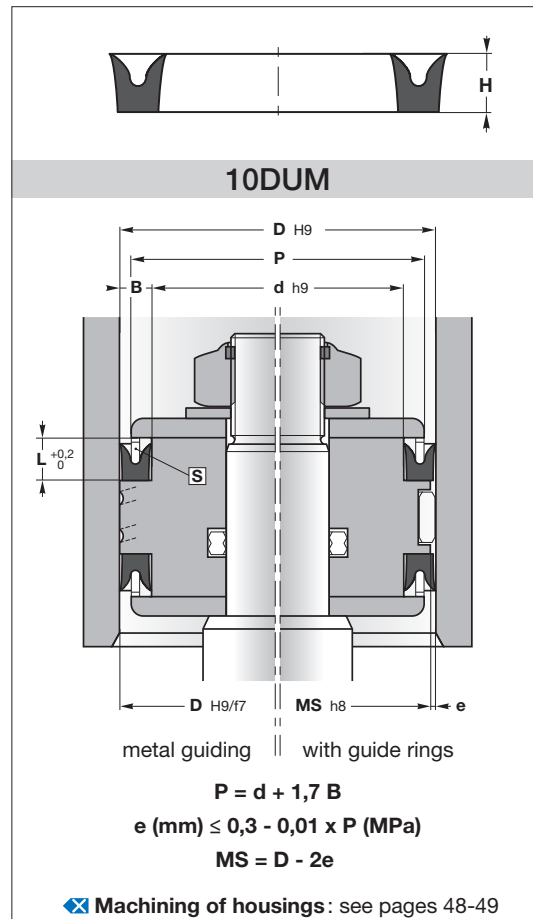
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

D	d	L	H	Reference
12	5	6,5	5	10DUM 1205
15	8	7,5	6	10DUM 1508
16	8	7,5	6	10DUM 1608
	10	4,5	3	10DUM 1610
17	6	7,5	6	10DUM 1706
18	6	9,5	8	10DUM 1806
20	6	9,5	8	10DUM 2006
	10	9,5	8	10DUM 2010
22	10	7,5	6	10DUM 2210
24	12	7,5	6	10DUM 2412
25	8	7,5	6	10DUM 2508
	10	11,5	10	10DUM 2510
26	10	9,5	8	10DUM 2610
28	12	11,5	10	10DUM 2812
	14	11,5	10	10DUM 2814
30	10	11,5	10	10DUM 3010
	13	11,5	10	10DUM 3013
	15	9,5	8	10DUM 3015
	15	11,5	10	10DUM 3015/1
	18	11,5	10	10DUM 3018
32	14	11,5	10	10DUM 3214
	16	9,5	8	10DUM 3216
34	18	9,5	8	10DUM 3418
	22	11,5	10	10DUM 3422
35	12	13,5	12	10DUM 3512
	15	11,5	10	10DUM 3515
	20	11,5	10	10DUM 3520
36	16	11,5	10	10DUM 3616
	20	9,5	8	10DUM 3620
38	17	11,5	10	10DUM 3817
	18	11,5	10	10DUM 3818
	22	11,5	10	10DUM 3822
40	18	11,5	10	10DUM 4018
	20	11,5	10	10DUM 4020
	25	11,5	10	10DUM 4025

D	d	L	H	Reference
42	22	11,5	10	10DUM 4222
	25	9,5	8	10DUM 4225
43	20	13,5	12	10DUM 4320
45	25	11,5	10	10DUM 4525
	30	11,5	10	10DUM 4530
	32	11,5	10	10DUM 4532
46	26	11,5	10	10DUM 4626
48	28	11,5	10	10DUM 4828
50	25	13,5	12	10DUM 5025
	30	11,5	10	10DUM 5030
	35	11,5	10	10DUM 5035
52	32	11,5	10	10DUM 5232
55	35	11,5	10	10DUM 5535
56	40	11,5	10	10DUM 5640
58	38	11,5	10	10DUM 5838
60	30	16,5	15	10DUM 6030
	35	13,5	12	10DUM 6035
	40	11,5	10	10DUM 6040
65	40	13,5	12	10DUM 6540
	45	11,5	10	10DUM 6545
68	48	11,5	10	10DUM 6848
70	46	13,5	12	10DUM 7046
	50	11,5	10	10DUM 7050
75	55	11,5	10	10DUM 7555
80	55	13,5	12	10DUM 8055
	60	11,5	10	10DUM 8060
85	55	16,5	15	10DUM 8555
	65	11,5	10	10DUM 8565
90	60	16,5	15	10DUM 9060
	65	13,5	12	10DUM 9065
	70	11,5	10	10DUM 9070
95	65	13,5	12	10DUM 9565
	75	11,5	10	10DUM 9575

References 10DUM and 10DUM.../ROD are identical seals.

10DUM seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10DUM is a symmetrical U-ring with sharp sealing lips. In this case, the sealing edges aren't below the seal height, therefore this profile has to be used with a header ring. The header ring can be made in metal, plastic or in rubber. This profile is primarily used as piston seal, but it can also be used as rod seal.

10DUM is also suitable for pneumatic applications.

Operating conditions [X](#) see page 8

Pressure	≤ 10 MPa
Temperature	-15°C to 120°C
Speed	≤ 0,5 m/s
Fluids	X see pages 22-45

Materials [X](#) see pages 10-19

Seal	NBR8090
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Assembly [X](#) see pages 54-59

On multi-piece pistons

With profiles 10DU and 10DUM a header ring S must be mounted with the seal

Advantages

- Low friction
- Good price-performance ratio
- Suitable for rods and pistons

Please contact us for applications approaching maximum values.

More information

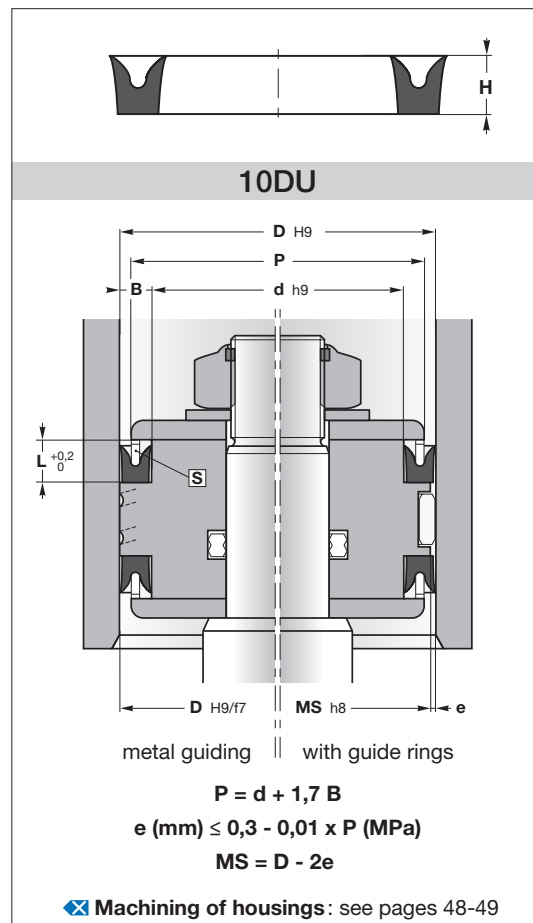
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

D	d	L	H	Reference
100	75	16,5	15	10DUM 100075
	80	11,5	10	10DUM 100080
105	75	16,5	15	10DUM 105075
	80	13,5	12	10DUM 105080
	85	11,5	10	10DUM 105085
110	80	16,5	15	10DUM 110080
	85	13,5	12	10DUM 110085
	90	11,5	10	10DUM 110090
115	85	16,5	15	10DUM 115085
	95	11,5	10	10DUM 115095
120	90	16,5	15	10DUM 120090
	100	11,5	10	10DUM 120100
125	95	16,5	15	10DUM 125095
	100	13,5	12	10DUM 125100
130	100	16,5	15	10DUM 130100
135	110	13,5	12	10DUM 135110
140	110	16,5	15	10DUM 140110
	120	11,5	10	10DUM 140120
145	115	13,5	12	10DUM 145115
150	120	16,5	15	10DUM 150120
	125	19,5	18	10DUM 150125
155	125	16,5	15	10DUM 155125
160	130	16,5	15	10DUM 160130
	135	19,5	18	10DUM 160135
165	140	19,5	18	10DUM 165140
170	140	16,5	15	10DUM 170140
175	145	16,5	15	10DUM 175145
180	150	16,5	15	10DUM 180150
190	160	16,5	15	10DUM 190160
200	160	21,5	20	10DUM 200160
	170	16,5	15	10DUM 200170
210	170	21,5	20	10DUM 210170
	180	23,5	22	10DUM 210180

D	d	L	H	Reference
220	180	21,5	20	10DUM 220180
	190	16,5	15	10DUM 220190
225	195	16,5	15	10DUM 225195
230	200	16,5	15	10DUM 230200
240	200	21,5	20	10DUM 240200
250	210	21,5	20	10DUM 250210
260	220	21,5	20	10DUM 260220
270	230	21,5	20	10DUM 270230
280	240	21,5	20	10DUM 280240
290	250	21,5	20	10DUM 290250
300	260	21,5	20	10DUM 300260
	280	21,5	20	10DUM 320280
340	300	21,5	20	10DUM 340300
350	310	21,5	20	10DUM 350310
	320	23,5	22	10DUM 350320
360	320	21,5	20	10DUM 360320
380	340	21,5	20	10DUM 380340
400	350	26,5	25	10DUM 400350
450	400	26,5	25	10DUM 450400
500	450	26,5	25	10DUM 500450

References 10DUM and 10DUM.../ROD are identical seals.

10DUM seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10DU is a symmetrical U-ring with sharp sealing lips. In this case, the sealing edges aren't below the seal height, therefore this profile has to be used with a header ring. The header ring can be made in metal, plastic or in rubber. This profile is primarily used as piston seal, but it can also be used as rod seal.

10DU is also suitable for pneumatic applications.

Operating conditions see page 8

Pressure	≤ 10 MPa
Temperature	-15°C to 120°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal	NBR8090
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Assembly see pages 54-59

On multi-piece pistons

With profiles 10DU and 10DUM a header ring must be mounted with the seal

Advantages

- Low friction
- Good price-performance ratio
- Suitable for rods and pistons

Please contact us for applications approaching maximum values.

More information

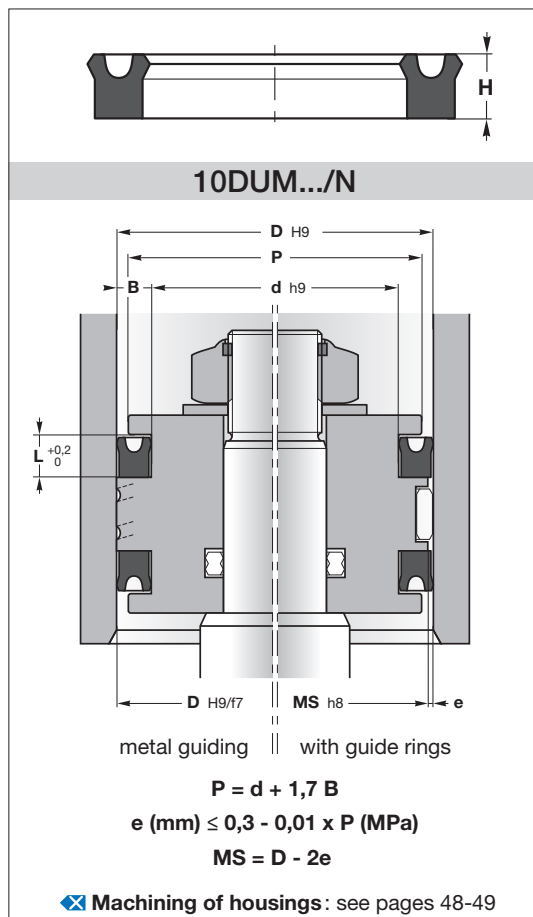
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Inch dimensions

D	d	L	H	Reference
9,52	4,76	4	2,38	10DU 037018
11,11	6,35	4,5	3,17	10DU 043025
14,28	7,93	4,5	3,17	10DU 056031
15,87	9,52	4,5	3,17	10DU 062037
19,05	11,11	6,5	4,76	10DU 075043
25,4	15,87	8	6,35	10DU 100062
31,75	19,05	8	6,35	10DU 125075
36,51	20,63	11	9,52	10DU 143081
46,04	26,99	11	9,52	10DU 181106
55,56	38,1	8	6,35	10DU 218150
79,38	60,33	11	9,52	10DU 312237
101,6	77,79	14,5	12,7	10DU 400306
111,12	92,08	11	9,52	10DU 437362
152,4	127	14,5	12,7	10DU 600500
158,8	133,35	14,5	12,7	10DU 625525

References 10DU and 10DU.../ROD are identical seals.

10DU seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10DUM.../N can be used in both rod and piston applications thanks to the symmetrical lip design.

10DUM.../N is also suitable for pneumatic applications.

Operating conditions ✕ see page 8

Pressure	≤ 10 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Seal	NBR8085 or NBR8490
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Assembly ✕ see pages 54-59

On one-piece pistons

Advantages

- Low friction
- Good price-performance ratio
- Suitable for rods and pistons

Please contact us for applications approaching maximum values.

More information

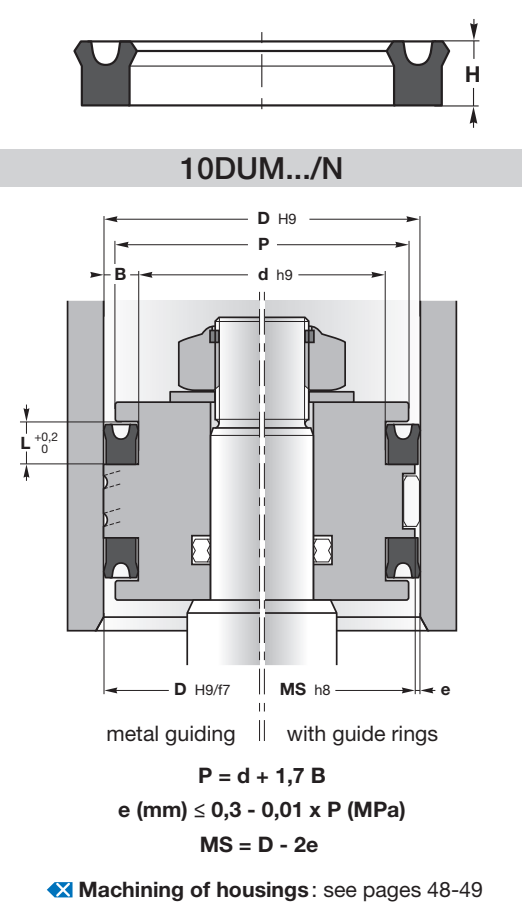
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

D	d	L	H	Reference
12	4	4,5	4	10DUM 1204/N
13	5	4,5	4	10DUM 1305/N
14	6	4,5	4	10DUM 1406/N
15	5	5,5	5	10DUM 1505/N
	7	4,5	4	10DUM 1507/N
16	6	5,5	5	10DUM 1606/N
	8	4,5	4	10DUM 1608/N
18	8	5,5	5	10DUM 1808/N
	10	4,5	4	10DUM 1810/N
20	8	6,6	6	10DUM 2008/N
	10	5,5	5	10DUM 2010/N
	12	4,5	4	10DUM 2012/N
22	10	6,6	6	10DUM 2210/N
	12	5,5	5	10DUM 2212/N
	14	4,5	4	10DUM 2214/N
24	12	6,6	6	10DUM 2412/N
	14	5,5	5	10DUM 2414/N
	16	4,5	4	10DUM 2416/N
25	13	6,6	6	10DUM 2513/N
	15	5,5	5	10DUM 2515/N
	17	4,5	4	10DUM 2517/N
26	16	5,5	5	10DUM 2616/N
	18	4,5	4	10DUM 2618/N
27	15	6,6	6	10DUM 2715/N
28	16	6,6	6	10DUM 2816/N
	18	5,5	5	10DUM 2818/N
	20	4,5	4	10DUM 2820/N
30	15	8,3	7,5	10DUM 3015/N
	18	6,6	6	10DUM 3018/N
	20	5,5	5	10DUM 3020/N
	22	4,5	4	10DUM 3022/N
32	20	6,6	6	10DUM 3220/N
	22	5,5	5	10DUM 3222/N
	24	4,5	4	10DUM 3224/N
33	21	6,6	6	10DUM 3321/N
	25	4,5	4	10DUM 3325/N

D	d	L	H	Reference
34	22	6,6	6	10DUM 3422/N
	24	5,5	5	10DUM 3424/N
	26	4,5	4	10DUM 3426/N
35	20	8,3	7,5	10DUM 3520/N
	23	6,6	6	10DUM 3523/N
	25	5,5	5	10DUM 3525/N
	27	4,5	4	10DUM 3527/N
36	24	6,6	6	10DUM 3624/N
	26	5,5	5	10DUM 3626/N
	28	4,5	4	10DUM 3628/N
37	25	6,6	6	10DUM 3725/N
	29	4,5	4	10DUM 3729/N
38	26	6,6	6	10DUM 3826/N
	28	5,5	5	10DUM 3828/N
	30	4,5	4	10DUM 3830/N
40	25	8,3	7,5	10DUM 4025/N
	28	6,6	6	10DUM 4028/N
	30	5,5	5	10DUM 4030/N
	32	4,5	4	10DUM 4032/N
42	32	5,5	5	10DUM 4232/N
44	32	6,6	6	10DUM 4432/N
45	30	8,3	7,5	10DUM 4530/N
	33	6,6	6	10DUM 4533/N
	35	5,5	5	10DUM 4535/N
46	36	5,5	5	10DUM 4636/N
48	38	5,5	5	10DUM 4838/N
50	35	8,3	7,5	10DUM 5035/N
	38	6,6	6	10DUM 5038/N
	40	5,5	5	10DUM 5040/N
52	40	6,6	6	10DUM 5240/N
	42	5,5	5	10DUM 5242/N
55	40	8,3	7,5	10DUM 5540/N
	43	6,6	6	10DUM 5543/N
	45	5,5	5	10DUM 5545/N
56	46	5,5	5	10DUM 5646/N

References 10DUM.../N and 10DUM.../N/ROD are identical seals.

10DUM.../N seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10DUM.../N can be used in both rod and piston applications thanks to the symmetrical lip design.

10DUM.../N is also suitable for pneumatic applications.

Operating conditions see page 8

Pressure	≤ 10 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal	NBR8085 or NBR8490
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Assembly see pages 54-59

On one-piece pistons

Advantages

- Low friction
- Good price-performance ratio
- Suitable for rods and pistons

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

D	d	L	H	Reference
58	46	6,6	6	10DUM 5846/N
60	45	8,3	7,5	10DUM 6045/N
	48	6,6	6	10DUM 6048/N
	50	5,5	5	10DUM 6050/N
62	50	6,6	6	10DUM 6250/N
63	51	6,6	6	10DUM 6351/N
	53	5,5	5	10DUM 6353/N
65	50	8,3	7,5	10DUM 6550/N
	53	6,6	6	10DUM 6553/N
	55	5,5	5	10DUM 6555/N
66	54	6,6	6	10DUM 6654/N
67	55	6,6	6	10DUM 6755/N
70	55	8,3	7,5	10DUM 7055/N
	60	5,5	5	10DUM 7060/N
73	63	5,5	5	10DUM 7363/N
75	60	8,3	7,5	10DUM 7560/N
	65	5,5	5	10DUM 7565/N

D	d	L	H	Reference
80	65	8,3	7,5	10DUM 8065/N
	70	5,5	5	10DUM 8070/N
85	70	8,3	7,5	10DUM 8570/N
90	75	8,3	7,5	10DUM 9075/N
	80	5,5	5	10DUM 9080/N
95	80	8,3	7,5	10DUM 9580/N
	85	5,5	5	10DUM 9585/N
100	85	8,3	7,5	10DUM 100085/N
	90	5,5	5	10DUM 100090/N
105	90	8,3	7,5	10DUM 105090/N
110	95	8,3	7,5	10DUM 110095/N
	100	5,5	5	10DUM 110100/N
120	105	8,3	7,5	10DUM 120105/N
125	110	8,3	7,5	10DUM 125110/N
130	115	8,3	7,5	10DUM 130115/N
140	125	8,3	7,5	10DUM 140125/N

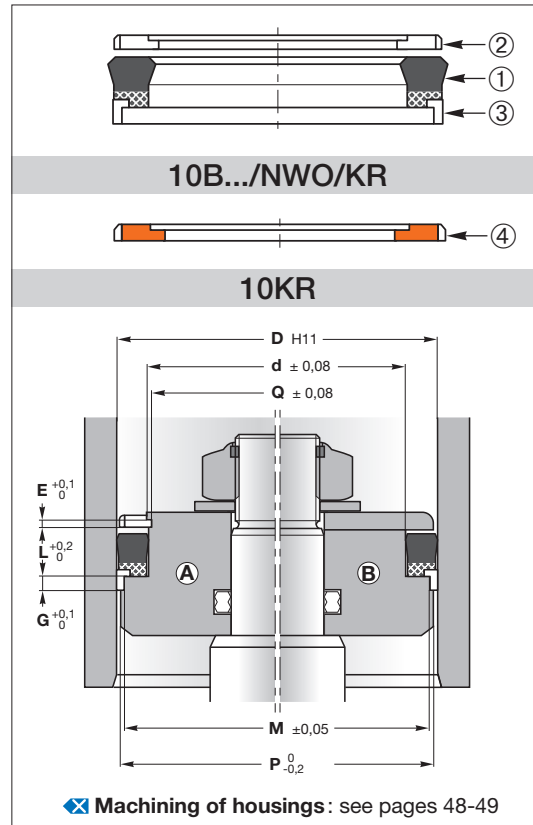
References 10DUM.../N and 10DUM.../N/ROD are identical seals.

10DUM.../N seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10B.../NWO/KR

Fabric reinforced single acting piston seal with guide ring



10B.../NWO/KR is composed of an elastomer rubber sealing element, a fabric reinforced base and an angular integrated wear ring which guides the piston in the cylinder and supports radial loads. The fabric reinforced base prevents the seal from extrusion and the guide/back-up rings enables higher pressure conditions and minimises the extrusion gap. The sealing element has a low compression set and the sealing lips are produced to give an optimum efficiency.

10B.../NWO/KR is also composed of a keeper ring which helps the assembly in the open groove of the piston seal, especially those with a large radial section.

Operating conditions see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 120°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Sealing element ①	N8T60/N8T60-C
Keeper ring 10KR ② as part of 10B.../NWO/KR	PO0WC
Guide ring ③	PO0WC
Keeper ring 10KR alone ④	POM24

Assembly see pages 54-59

- On one-piece pistons ①
- On two-piece pistons ②

Advantages

- Efficient sealing even at low pressure
- Small section
- Extrusion resistance at high pressure

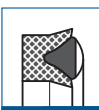
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

10B.../NWO/KR								
D	d	L	G	E	M	P	Q	Reference
35	22	10	6,35	3,1	31,4	34	17,8	10B 137086/NWO/KR
40	26	9,4	6,35	3,1	35,4	39	21,6	10B 157102/NWO/KR
50	30	14,5	6,35	3,35	44,3	49	25,8	10B 196118/NWO/KR
63	45	11	6,35	3,1	58,4	62	40,84	10B 248177/NWO/KR
70	50	14,5	6,35	3,35	64,2	69	45,84	10B 275196/NWO/KR
80	60	14,5	6,35	3,35	74,3	79	55,8	10B 314236/NWO/KR
90	70	14,5	6,35	3,35	84,15	89	66,1	10B 354275/NWO/KR
100	80	14,5	6,35	3,35	94,15	99	75,84	10B 393314/NWO/KR
104,5	85	13	6,35	3,35	98,9	103,5	81,1	10B 411334/NWO/KR
110	90	13	6,35	3,1	104,15	109	85,9	10B 433354/1/NWO/KR
115	95	14,5	6,35	3,35	109,9	114	90,5	10B 452374/NWO/KR
125	105	12,5	6,35	3,35	119,15	124	101	10B 492413/NWO/KR

10KR					
D	d	H	E	Q	Reference
45	30	5,9	3,1	25,8	10KR 177118
50	30	6,4	3,35	25,8	10KR 196118
55	40	5,8	3,1	35,8	10KR 216157
60	40	6,3	3,35	36,1	10KR 236157
70	50	6,3	3,35	45,84	10KR 275196
80	60	6,3	3,35	55,8	10KR 314236



10DS is made of a fabric reinforced NBR chevron ring. The elastomere header ring energises the U-ring when pressure is applied.

This profile is generally used as piston seal, but it can be also used as rod seal.

Operating conditions see page 8

Pressure	≤ 25 MPa
Temperature	-40°C to 120°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Sealing element ①	NBR8275-C
Energising ring ②	NBR8275

Assembly see pages 54-59

On multi-piece pistons

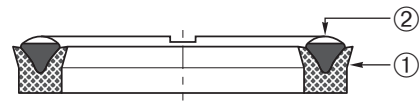
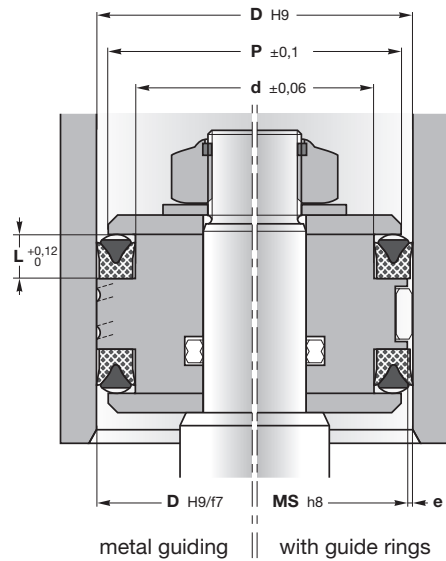
Advantages

Extrusion resistance at high pressure

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

**10DS**

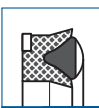
$$P = D - 3 \text{ mm}$$

$$e \text{ (mm)} \leq 0,15$$

$$MS = D - 2e$$

 **Machining of housings:** see pages 48-49

D	d	L	Alternative reference	Reference
24	12	7,5		10DS 094047
40	25	10	15DSE 4025	10DS 157098
50	35	10	15DSE 5035	10DS 196137
55	40	9,5	15DSE 5540	10DS 216157/1
65	45	13,5		10DS 255177
70	50	13,5		10DS 275196
80	60	13,5		10DS 314236
90	70	13,5		10DS 354275
105	85	13,5	15DSE 10585	
110	90	13,5		10DS 433354
125	100	16,2	15DSE 125100	
140	115	16,2	15DSE 140115	
150	120	18,8	15DSE 150120	
160	130	18,8	15DSE 160130	
200	170	19,8	15DSE 200170	
225	195	19,8		10DS 886767
230	200	19,8		10DS 905787
250	220	19,8	15DSE 250220	10DS 984866
260	230	19,8		10DS 1082965
275	245	19,8		10DS 1082965
300	270	19,8		10DS 11811062



10DS.../NEO

Fabric reinforced piston seal for open groove



10DS.../NEO is made of a fabric reinforced chevron ring. The elastomere header ring energises the U-ring when pressure is applied.

10DS.../NEO has moreover a back-up ring on the outside diameter which enables **higher pressure conditions** and minimises the extrusion gap.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-40°C to 120°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Sealing element ①	N8T60-C
Energising ring ②	N9T60
Anti-extrusion ring ③	PO0WC

Assembly

✕ see pages 54-59

On multi-piece pistons

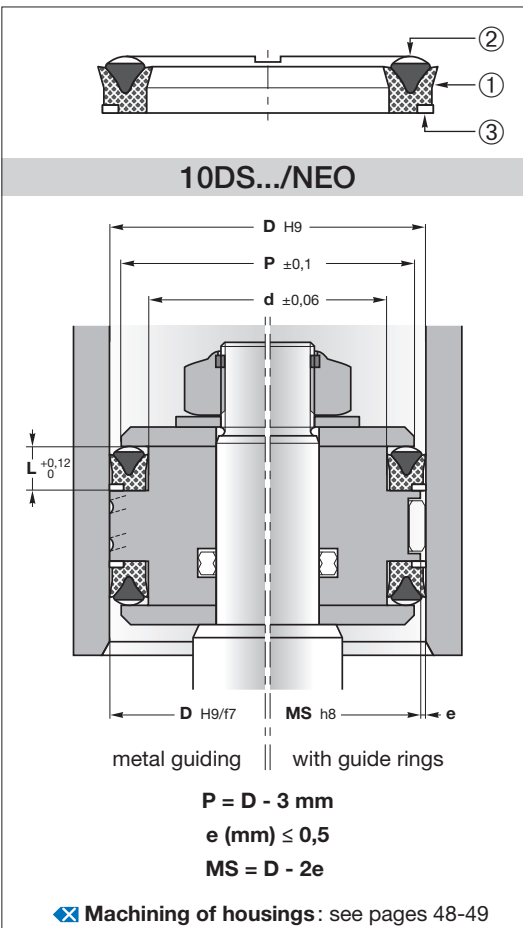
Advantages

Extrusion resistance at high pressure

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

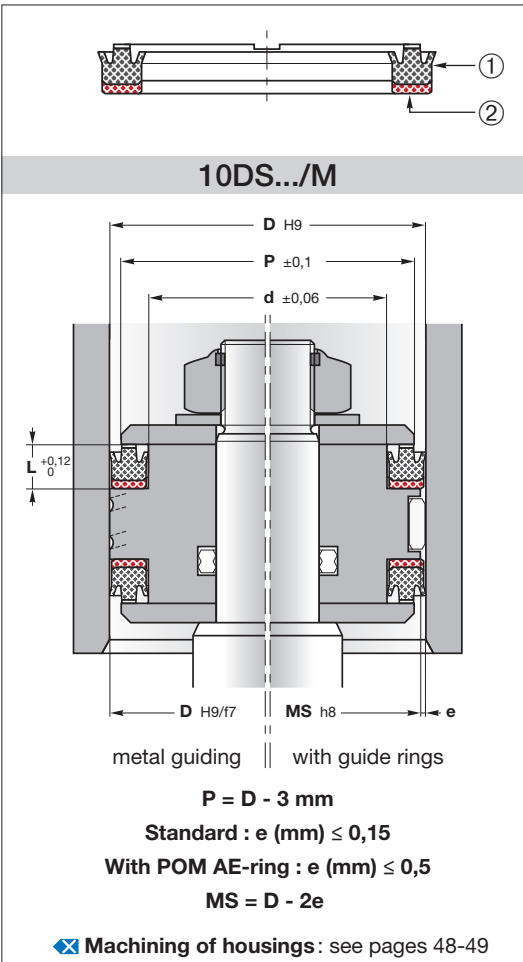


D	d	L	Reference 15DSE.../NEO	Reference
63	48	10	15DSE 6348/NEO	10DS 248188/NEO
65	45	13,5	15DSE 6545/NEO	10DS 255177/NEO
70	50	13,5	15DSE 7050/NEO	10DS 275196/NEO
75	55	13,5	15DSE 7555/NEO	
80	60	13,5	15DSE 8060/NEO	10DS 314236/NEO
85	65	13,5		10DS 334255/NEO
90	70	13,5	15DSE 9070/NEO	10DS 354275/NEO
100	80	13,5	15DSE 10080/NEO	10DS 393314/NEO
100	80	13		10DS 393314/1/NEO
105	85	13,5		10DS 413334/NEO
110	90	13,5	15DSE 11090/NEO	10DS 433354/NEO
115	95	13,5	15DSE 11595/NEO	
120	100	13,5	15DSE 120100/NEO	10DS 472393/NEO
122	102	14,6		10DS 480401/NEO
125	100	16,2		10DS 492393/NEO
130	105	16,2		10DS 511413/NEO
140	115	16,2		10DS 551452/NEO
150	120	18,8		10DS 590472/NEO
160	130	18		10DS 629511/NEO



10DS.../M

Fabric reinforced piston seal for open groove



10DS.../M is made of two different parts: the sealing element is realised in an elastomer rubber fabric and the back-up ring is printed with a very rigid special fabric which has a good antiextrusion resistance and assures a long life to seal element.

10DS.../M is generally used in double acting cylinders even for their little encumbrance.

Operating conditions see page 8

Pressure ≤ 40 MPa
Temperature -40°C to 120°C
Speed $\leq 0,5$ m/s
Fluids  see pages 22-"F. Fluid compatibility fin", page 45

Materials see pages 10-19

Sealing element ① NBR8275-C
Anti-extrusion ring ② Hard nitrile-fabric
On demand: acetal resin

Assembly see pages "K. Assembly of seals", page 54-59

On multi-piece pistons

Advantages

Extrusion resistance at high pressure
Space-saving construction

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	Reference
40	25	10	10DS 157098/M
50	35	10	10DS 196137/M
60	45	10	10DS 236177/M
63	48	10	10DS 248188/M
80	60	13	10DS 314236/M
90	70	13	10DS 354275/M
100	80	13	10DS 393314/M
110	90	13	10DS 433354/M
115	90	16,2	10DS 452354/M
115	95	13	10DS 452374/M
125	100	16,2	10DS 492393/M
140	115	16,2	10DS 551452/M
150	120	19,8	10DS 590472/M
160	130	19,8	10DS 629511/M
180	150	19,8	10DS 708590/M
200	170	19,8	10DS 787669/M



10CH3

V-pack piston seal



11CH3 FPM-C  page 619

10CH3 is made of a support ring, one V-shaped sealing element and a pressure energising spreader ring. The base ring manufactured in cotton fabric reinforced rubber for a good anti-extrusion resistance guides and supports the V-ring for effective performance.

The fabric reinforced NBR V-ring is the main sealing element, being sensitive to pressure variations assuring good sealing performances in all conditions.

The energiser ring ensures uniform **pressure distribution** on the other rings. This element is produced in acetal resin.

Operating conditions

 see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 120°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials

 see pages 10-19

V-ring ①	NBR8470-C
Spreader ring ②	POM84
Base ring ③	NBR8470-C

Assembly

 see pages 54-59

On multi-piece pistons

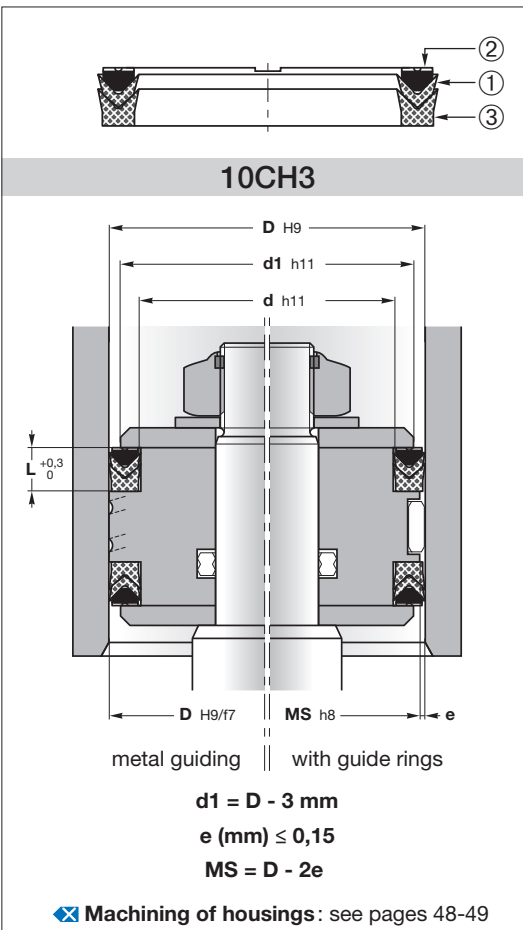
Advantages

Exceptional resistance to wear
For difficult operating conditions

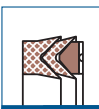
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

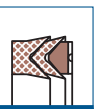


D	d	L	Reference
30	20	9,3	10CH3-030
32	20	10,9	10CH3-032
40	25	11,5	10CH3-040
45	30	11,5	10CH3-045
50	35	11,5	10CH3-050
55	40	11,5	10CH3-055
60	45	11,5	10CH3-060
63	48	13	10CH3-063
65	50	13	10CH3-065
70	50	15,2	10CH3-070
80	60	15,2	10CH3-080
90	70	21,2	10CH3-090
100	80	21,2	10CH3-100
110	90	21,2	10CH3-110
115	95	21,2	10CH3-115
125	100	25,8	10CH3-125
140	115	25,8	10CH3-140
150	120	29	10CH3-150
160	130	29	10CH3-160
180	150	31,5	10CH3-180
200	170	33,5	10CH3-200
220	190	33,5	10CH3-220
225	195	33,5	10CH3-225
240	210	33,5	10CH3-240
250	220	33,5	10CH3-250
275	245	33,5	10CH3-275
300	270	33,5	10CH3-300



11CH3 FPM-C

FPM V-pack piston seal



11CH3 FPM-C is made of a support ring, one V-shaped sealing element and a pressure energising spreader ring. The base ring manufactured in cotton fabric reinforced rubber for a good anti-extrusion resistance guides and supports the V-ring for effective performance.

The fabric reinforced FPM V-ring is the main sealing element being sensitive to pressure variations assuring good sealing performances in all conditions.

The energiser ring ensures uniform **pressure distribution** on the other rings. This element is produced in fabric reinforced FPM.

Operating conditions

✕ see page 8

Pressure	≤ 40 MPa
Temperature	-10°C to 150°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

V-Ring ①	FPM8471-C
Spreader ring ②	FPM8471-C
Base ring ③	FPM8471-C

Assembly

✕ see pages 54-59

On multi-piece pistons

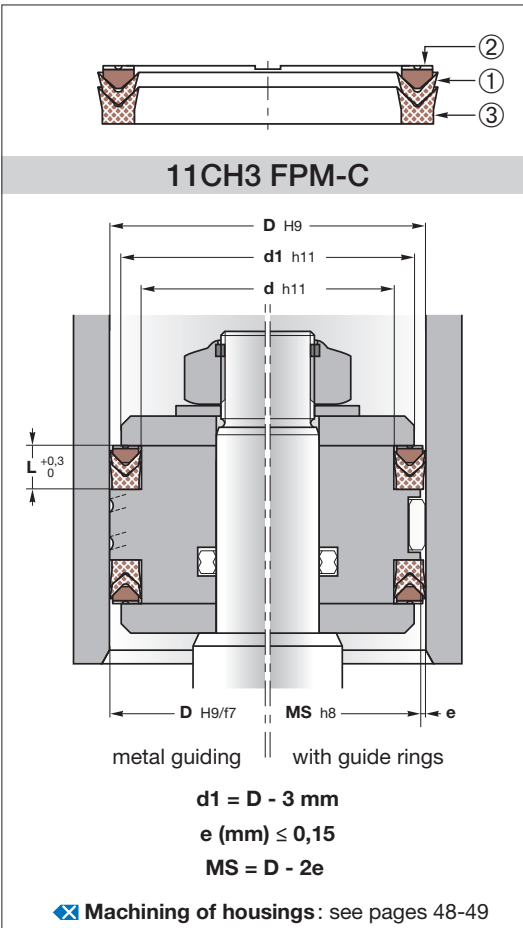
Advantages

- High operating temperature capability
- Exceptional resistance to wear
- For difficult operating conditions

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

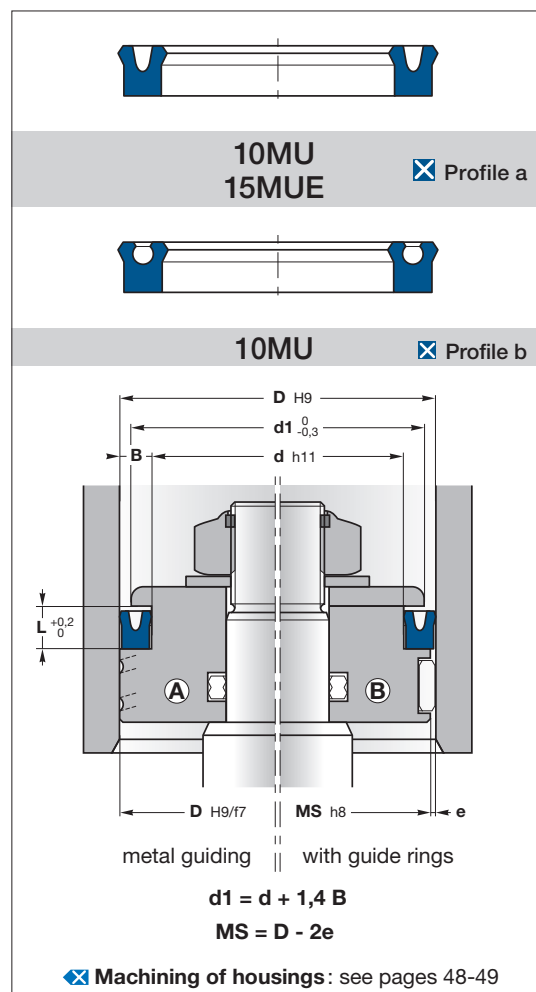


D	d	L	Reference
40	25	11,5	11CH3-040 FPM-C
50	35	11,5	11CH3-050 FPM-C
63	48	13	11CH3-063 FPM-C
80	60	15,2	11CH3-080 FPM-C
100	80	21,2	11CH3-100 FPM-C
125	100	25,8	11CH3-125 FPM-C
140	115	25,8	11CH3-140 FPM-C
160	130	29	11CH3-160 FPM-C
180	150	31,5	11CH3-180 FPM-C
200	170	33,5	11CH3-200 FPM-C
220	190	33,5	11CH3-220 FPM-C
250	220	33,5	11CH3-250 FPM-C
300	270	33,5	11CH3-300 FPM-C



10MU

PU piston seal with symmetrical lips



10MU is a high performance symmetrical lipseal which can be used in both rod and piston applications. With a wide range of dimensions, **10MU** has an efficient price-performance ratio.

They are produced in polyurethane that insures excellent wear resistance, extended service life and resistance against extrusion.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal	PU08, PU09, PU10, PU12 or PU37
------	--------------------------------

Assembly see pages 54-59

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

- Good price-performance ratio
- Symmetrical seal for rods and pistons
- Excellent abrasion resistance
- For new constructions we recommend RSE shape
- For MU seals with profile B, it's possible to put an O-ring between the lips of the seal to obtain the 10EUS profile, only to use in cases of single-acting applications.

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

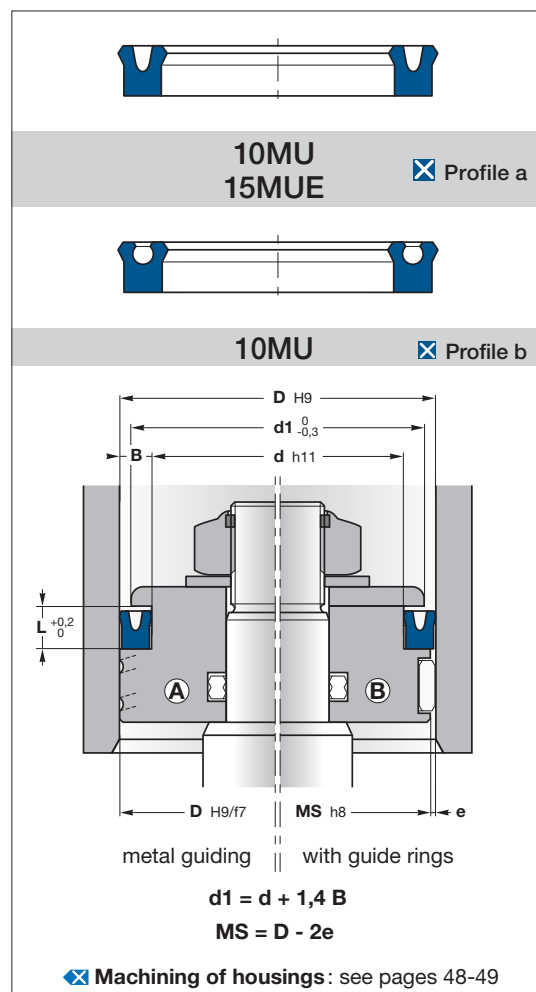
Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L		O-ring NBR 70 Sh A	Reference	D	d	L		O-ring NBR 70 Sh A	Reference
9	3	5	a		10MU 0903	18	8	5,5	a		10MU 1808
	4	4,5	a		10MU 0904		8	8	a		10MU 1808/1
10	4	4,5	a		10MU 1004		8	10	b	11,11 x 2,62	10MU 1808/2
	4	5	a		10MU 1004/1 •	19	10	4,5	a		10MU 1810/3
11	4,5	5,5	a		10MU 1104		10	6	b	12,42 x 1,78	10MU 1810/1
							10	7	a		10MU 1810 •
12	4	4,5	a		10MU 1204	20	10	9	a		10MU 1810/4 •
	5	5	a		10MU 1205/4		12	5,5	a		10MU 1812 •
	5	5,5	a		10MU 1205/1 •		12	7	a		10MU 1812/1 •
	5	6,5	a		10MU 1205/2 •	21	9	7	a		10MU 1909/1 •
	5	7	a		10MU 1205		8	7	a		10MU 2008
	6	4,5	a		10MU 1206 •		8	9	a		10MU 2008/1
	6	6	a		10MU 1206/4 •	22	10	5,5	a		10MU 2010
	6	6,5	a		10MU 1206/5 •		10	8	a		10MU 2010/2
	6	9	a		10MU 1206/2		10	9	b	12,42 x 1,78	10MU 2010/1 •
12,5	8	3,5	a		10MU 1208 •		12	4,5	a		10MU 2012/1 •
	4,5	5	a		10MU 1205/3	23	12	8	a		10MU 2012/2
							12	9	a		10MU 2012 •
12,7	5	9	a		10MU 1305/1		13	7	a		10MU 2013
	6	6,5	a		10MU 1306	24	14	5,3	a		10MU 2014 •
	6,3	4,5	a		10MU 1206/3						
13	5	4,5	a		10MU 1305	25	14,3	5,5	a		10MU 2114
	7	4,2	a		10MU 1407		13	6,5	a		10MU 2113
	8	7	a		10MU 1408 •		14,7	7	a		10MU 2114/1
15	6	9	a		10MU 1506 •	26	8	9	a		10MU 2208 •
	7	4,5	a		10MU 1507		9	9,5	a		10MU 2209
	7	8	a		10MU 1507/1		10	7	a		10MU 2210
	8	6,3	a		10MU 1508 •	27	10	9	b	14,00 x 1,78	10MU 2210/1
	8	9	a		10MU 1508/2 •		12	6	b	14,00 x 1,78	10MU 2212
	9	9	a		10MU 1509		12	8	b	14,00 x 1,78	10MU 2212/4 •
16	6	5,5	a		10MU 1606	28	12	9	b	14,00 x 1,78	10MU 2212/1 •
	8	4,5	a		10MU 1608		14	4,5	a		10MU 2214
	8	6,3	a		10MU 1608/2 •		14	7	a		10MU 2214/1 •
	8	8	a		10MU 1608/3	29	14	9	a		10MU 2214/2 •
	10	4,5	a		10MU 1610/1		14	12	a		10MU 2214/3
	10	6,5	a		10MU 1610 •		16	4,5	a		10MU 2216
17	5	10	b	9,25 x 1,78	10MU 1705	30	16	5,5	a		10MU 2216/2
	11	5	a		10MU 1711						

References followed by • exist in **15MUE**. All **15MUE** references have profile A.

References 10MU and 10MU.../ROD are identical seals.

10MU seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
 For prices and availability: www.sealtech-business.be



Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

10MU is a high performance symmetrical lipseal which can be used in both rod and piston applications. With a wide range of dimensions, **10MU** has an efficient price-performance ratio.

They are produced in polyurethane that insures excellent wear resistance, extended service life and resistance against extrusion.

Operating conditions

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials

Seal	PU08, PU09, PU10, PU12 or PU37
------	--------------------------------

Assembly

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

- Good price-performance ratio
- Symmetrical seal for rods and pistons
- Excellent abrasion resistance
- For new constructions we recommend RSE shape
- For MU seals with profile B, it's possible to put an O-ring between the lips of the seal to obtain the 10EUS profile, only to use in cases of single-acting applications.

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	☒	O-ring NBR 70 Sh A	Reference	D	d	L	☒	O-ring NBR 70 Sh A	Reference		
24	12	6,5	a	15,60 x 1,78	10MU 2412	28	16	7	b	20,35 x 1,78	10MU 2816		
	12	9	b		10MU 2412/1		18	5,5	a		10MU 2818		
	14	5,5	a		10MU 2414/1		18	6,3	a		10MU 2818/2		
	14	9	b	17,17 x 1,78	10MU 2414	18	9	b	20,35 x 1,78	10MU 2818/1			
	16	4,5	a		10MU 2416/1		20	5		a	10MU 2820		
	16	6	a		10MU 2416/2		20	5,5		a	10MU 2820/1		
	16	7	a	10MU 2416/4	20	7	a	10MU 2820/2					
	16	9	a		10MU 2416/3	20	8		a	10MU 2820/4			
	16	10	a		10MU 2416	20	9		a	10MU 2820/3			
	25	10	8	a	10MU 2510	22	5	a	10MU 2822/1				
		12	9	a			10MU 2512/1	22		9	a	10MU 2822	
		12	11	a			10MU 2512	29		20	5,5	b	21,95 x 1,78
13		6,5	a	10MU 2513	30	15	8		a	10MU 3015			
13		10	a			10MU 2513/1	18		6,5	a	10MU 3018		
15		5,5	a			10MU 2515/1	18	9	a	10MU 3018/1			
15		9	b	18,77 x 1,78	10MU 2515/2	20	5,5	a	10MU 3020/1				
15		11	b				18,77 x 1,78	10MU 2515		20	8	a	10MU 3020/3
16		9	a				10MU 2516/1	20		9	a	10MU 3020/2	
17		4,5	a	10MU 2517	20	11	b	21,95 x 1,78	10MU 3020				
17		6,5	a			10MU 2517/1	22		4,5	a	10MU 3022/1		
17		11	a			10MU 2517/2	22		7	a	10MU 3022/2		
18		5,5	a	10MU 2518	22	7,5	a	10MU 3022					
18		7	a			10MU 2518/1	22		9	a	10MU 3022/4		
19		3,5	a			10MU 2519/1	22		11	a	10MU 3022/3		
19		7	a	10MU 2519	32	16	9	a	10MU 3216				
25,4		15,9	7			a	10MU 2516	20		6	a	10MU 3220	
								20		6,5	a	10MU 3220/4	
	20			8,5	b			23,52 x 1,78	10MU 3220/2				
26	16	6	b	18,77 x 1,78	10MU 2616	20	10		a	10MU 3220/1			
	16	9	b			18,77 x 1,78	10MU 2616/1		22	5,5	a	10MU 3222/1	
	16	11	a			10MU 2616/2	22	9	b	25,12 x 1,78	10MU 3222		
	18	4,5	a	10MU 2618/1	22	11		b	25,12 x 1,78	10MU 3222/2			
	18	7,5	a		10MU 2618	24		4,5	a	10MU 3224/2			
	18	9	a		10MU 2618/4	24	6,5	a	10MU 3224/3				
20	3,8	a	10MU 2620/1	24	7,5		a	10MU 3224/1					
20	6	a		10MU 2620	24		8	a		10MU 3224/4			
27	14	8		b	17,12 x 2,62	10MU 2714	33	23	8	a	10MU 3323/1		
	15	7	a	10MU 2715		25		4,5	a	10MU 3325/1			
	15	10	a	10MU 2715/1		25		5,5	a	10MU 3325/2			
	17	7,5	a	10MU 2717		25		7,5	a	10MU 3325			

References followed by • exist in **15MUE**. All **15MUE** references have profile A.

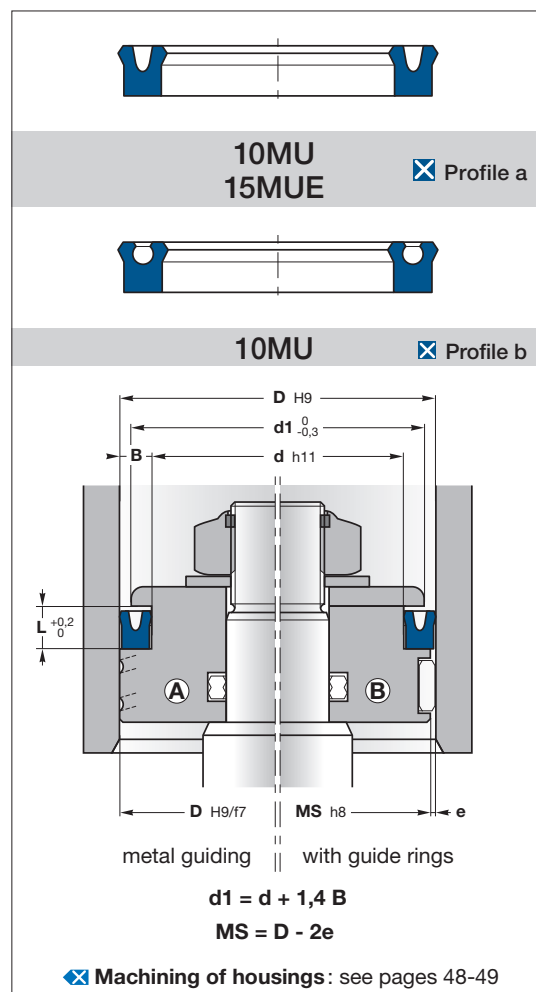
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10MU

PU piston seal with symmetrical lips



10MU is a high performance symmetrical lipseal which can be used in both rod and piston applications. With a wide range of dimensions, **10MU** has an efficient price-performance ratio.

They are produced in polyurethane that insures excellent wear resistance, extended service life and resistance against extrusion.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal PU08, PU09, PU10, PU12 or PU37

Assembly see pages 54-59

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

- Good price-performance ratio
- Symmetrical seal for rods and pistons
- Excellent abrasion resistance
- For new constructions we recommend RSE shape
- For MU seals with profile B, it's possible to put an O-ring between the lips of the seal to obtain the 10EUS profile, only to use in cases of single-acting applications.

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More information

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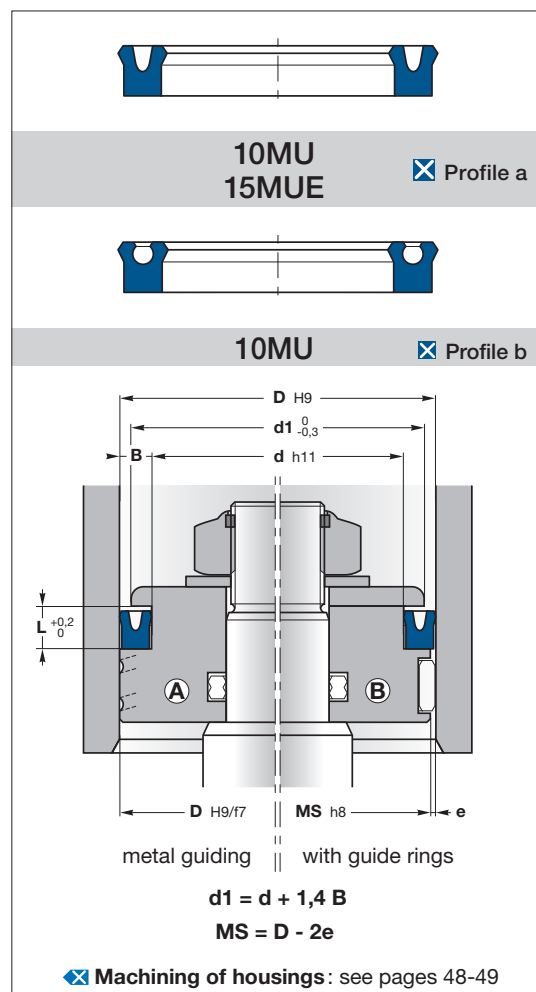
Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L	☒	O-ring NBR 70 Sh A	Reference	D	d	L	☒	O-ring NBR 70 Sh A	Reference		
34	22	6,5	a		10MU 3422	40	20	11	b	26,57 x 3,53	10MU 4020/1		
	24	5,5	a		10MU 3424		20	12	a		10MU 4020		
	26	4,5	a		10MU 3426		20	13	a		10MU 4020/2		
35	15	11	a		10MU 3515		22	11	b	26,57 x 3,53	10MU 4022		
	20	10	a		10MU 3520/2		25	8	a		10MU 4025		
	20	13	a		10MU 3520	•	25	11	b	29,82 x 2,62	10MU 4025/1		
	22	6	a		10MU 3522/1		28	6,5	a		10MU 4028		
	22	11	b	25,07 x 2,62	10MU 3522	•	28	11	b	29,87 x 1,78	10MU 4028/1		
	23	6,5	a		10MU 3523		30	5,5	b	31,47 x 1,78	10MU 4030/1		
	25	5,5	b	28,30 x 1,78	10MU 3525/1	•	30	7	b	31,47 x 1,78	10MU 4030/2		
	25	8	a		10MU 3525/3		30	8	a		10MU 4030/3		
	25	9	b	28,30 x 1,78	10MU 3525/2	•	30	9	a		10MU 4030/4		
	25	11	b	28,30 x 1,78	10MU 3525	•	30	11	a		10MU 4030		
	27	6,5	a		10MU 3527		32	4,5	a		10MU 4032/1		
	28	5,5	a		10MU 3528		32	6	b	34,65 x 1,78	10MU 4032		
36	22	11	a		10MU 3622		32	9	b	34,65 x 1,78	10MU 4032/3		
	24	6,5	a		10MU 3624		41,3	28,6	9	a		10MU 4129	
	24	10	a		10MU 3624/1			42	30	6,5	a		10MU 4230/1
	26	8	a		10MU 3626/1				30	10	b	34,65 x 1,78	10MU 4230
	28	7,5	a		10MU 3628	•	30		11	b	34,65 x 1,78	10MU 4230/2	
	30	4,5	a		10MU 3630								
37	25	6,5	a		10MU 3725		32	5,5	a		10MU 4232/1		
	25	10	a		10MU 3725/1		32	8	a		10MU 4232/2		
	29	4,5	a		10MU 3729		32	11	b	34,65 x 1,78	10MU 4232		
	30	7	a		10MU 3730		34	6,5	a		10MU 4234		
38	18	11	a		10MU 3818	43	33	5,5	a		10MU 4333		
	25	9	b	28,24 x 2,62	10MU 3825		35	9	a		10MU 4335/2		
	25	11	b	28,24 x 2,62	10MU 3825/2	•	44	32	6,5	a		10MU 4432	
	26	6,5	a		10MU 3826			32	10	a		10MU 4432/1	
	28	8	b	31,47 x 1,78	10MU 3828/3			34	8	a		10MU 4434/1	
	28	9	b	31,47 x 1,78	10MU 3828/1	•	45	25	11	a		10MU 4525	
	28	11	b	31,47 x 1,78	10MU 3828/2			30	10	a		10MU 4530	
	30	4,5	a		10MU 3830/1			30	11	b	34,59 x 2,62	10MU 4530/1	
	30	6,5	a		10MU 3830/2	•							
	30	8	a		10MU 3830			32	11	b	37,77 x 2,62	10MU 4532	
	38,1	25	7	a		10MU 3825/1		34	8	b	37,82 x 1,78	10MU 4534/1	
								34	10	b	37,82 x 1,78	10MU 4534	
39	20	11	a		10MU 3920		35	5,5	a		10MU 4535		
							35	7	b	37,82 x 1,78	10MU 4535/4		
							35	8	b	37,82 x 1,78	10MU 4535/5		

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References 10MU and 10MU.../ROD are identical seals.

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 For prices and availability: www.sealtech-business.be



Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

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They are produced in polyurethane that insures excellent wear resistance, extended service life and resistance against extrusion.

Operating conditions

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials

Seal	PU08, PU09, PU10, PU12 or PU37
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Assembly

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

- Good price-performance ratio
- Symmetrical seal for rods and pistons
- Excellent abrasion resistance
- For new constructions we recommend RSE shape
- For MU seals with profile B, it's possible to put an O-ring between the lips of the seal to obtain the 10EUS profile, only to use in cases of single-acting applications.

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More information

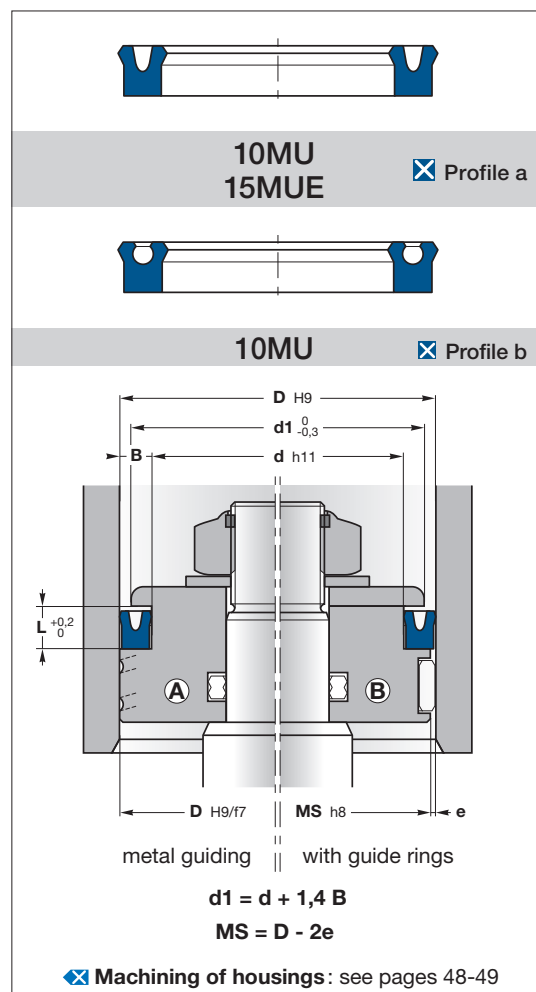
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	X	O-ring NBR 70 Sh A	Reference	D	d	L	X	O-ring NBR 70 Sh A	Reference
45	35	9	b	37,82 x 1,78	10MU 4535/2 •	52	32	11	a		10MU 5232
	35	11	b	37,82 x 1,78	10MU 4535/3 •		40	6,5	a		10MU 5240/1
	35,5	7,5	a		10MU 4535/6		40	9	a		10MU 5240
	37	6,5	a		10MU 4537		40	11	a		10MU 5240/2
	38	5,5	a		10MU 4538		42	5,5	a		10MU 5242
							42	10	a		10MU 5242/1
46	36	5,5	a		10MU 4636/1	53	38	9	a		10MU 5338
	36	8	b	39,34 x 2,62	10MU 4636		43	8	a		10MU 5343/1
	38	6,5	a		10MU 4638/1		45	7,5	b	47,35 x 1,78	10MU 5345
	38	7,5	b	41,00 x 1,78	10MU 4638		45	11	a		10MU 5345/1
47	35	10	a		10MU 4735/1		45	13	a		10MU 5345/2
						54	42	6,5	a		10MU 5442
48	32	11	a		10MU 4832		44	5,5	a		10MU 5444
	35	11	b	37,77 x 2,62	10MU 4835 •		44	8	a		10MU 5444/1
	36	6,5	a		10MU 4836/1	55	35	11	b	41,28 x 3,53	10MU 5535
							35	13	a		10MU 5535/1 •
50	36	9	a		10MU 4836		38	11	b	44,12 x 2,62	10MU 5538 •
	38	5,5	a		10MU 4838						
	40	6,5	a		10MU 4840		40	8	a		10MU 5540/3
	40	7	a		10MU 4840/3	56	40	11	a		10MU 5540 •
	40	9	a		10MU 4840/2 •		44	6,5	a		10MU 5540
	40	12	a		10MU 4840/1 •		45	8	b	47,35 x 1,78	10MU 5645
50	30	11	b	36,09 x 3,53	10MU 5030 •		45	13	a		10MU 5646
	30	13	b	36,09 x 3,53	10MU 5030/1 •	58	46	5,5	a		10MU 5646/1
	32	13	a		10MU 5032/1		46	8	a		
	35	8	a		10MU 5035		38	11	a		10MU 5838
	35	11	b	39,34 x 2,62	10MU 5035/1 •	60	45	11	a		10MU 5845/2
	38	6,5	a		10MU 5038		46	6,5	a		10MU 5846
50,8	38	10	a		10MU 5038/1 •		48	11	b	50,52 x 1,78	10MU 5848
	38	12	a		10MU 5038/2		50	5,5	a		10MU 5850
	40	5,5	b	44,17 x 1,78	10MU 5040/2	60	35	13	a		10MU 6035
	40	7	a		10MU 5040/4		40	11	b	46,04 x 3,53	10MU 6040/1 •
	40	7,5	b	44,17 x 1,78	10MU 5040 •		40	13	a		10MU 6040/4
	40	9	b	44,17 x 1,78	10MU 5040/3		40	14	b	46,04 x 3,53	10MU 6040/2 •
50,8	40	11	b	44,17 x 1,78	10MU 5040/1 •	60	40	19	a		10MU 6040/3 •
	42	6,5	b	44,17 x 1,78	10MU 5042/1		45	8	a		10MU 6045/1
	42	9	b	44,17 x 1,78	10MU 5042						
	44	9,5	a		10MU 5044						
	44,3	6	a		10MU 5141/1	60					

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They are produced in polyurethane that insures excellent wear resistance, extended service life and resistance against extrusion.

Operating conditions

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials

Seal PU08, PU09, PU10, PU12 or PU37

Assembly

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

- Good price-performance ratio
- Symmetrical seal for rods and pistons
- Excellent abrasion resistance
- For new constructions we recommend RSE shape
- For MU seals with profile B, it's possible to put an O-ring between the lips of the seal to obtain the 10EUS profile, only to use in cases of single-acting applications.

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More information

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Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L	☒	O-ring NBR 70 Sh A	Reference		D	d	L	☒	O-ring NBR 70 Sh A	Reference
60	45	11	b	48,90 x 2,62	10MU 6045	•	66	56	5,5	b	60,05 x 1,78	10MU 6656
	45	13	a		10MU 6045/2			56	8	a		10MU 6656/1
	48	6,5	a		10MU 6048			56	11	a		10MU 6656/2
	48	10	a		10MU 6048/1			56	12	a		10MU 6656/3
	50	5,5	a		10MU 6050/2		68	50	11	a		10MU 6850
	50	7	b	53,70 x 1,78	10MU 6050/3							
	50	8	b	53,70 x 1,78	10MU 6050/6	70		36	11	a		10MU 7036
	50	9	a		10MU 6050/5			40	16	a		10MU 7040
	50	11	b	53,70 x 1,78	10MU 6050		•	45	13	a		10MU 7045
50	12	a		10MU 6050/1	•		50	11	b	56,74 x 3,53	10MU 7050/1	
50	13	a		10MU 6050/4		50	13	b	56,74 x 3,53	10MU 7050		
52	6,5	a		10MU 6052		50	16	a		10MU 7050/2		
62	42	13	b	47,62 x 3,53	10MU 6242			50	19	a		10MU 7050/3
	50	10	b	53,70 x 1,78	10MU 6250	•		54	13	a		10MU 7054
	52	13	a		10MU 6252			55	8	a		10MU 7055/1
63	45	11	b	50,39 x 3,53	10MU 6345	•		55	11	a		10MU 7055
	48	11	a		10MU 6348			55	12	a		10MU 7055/3
	50	7	b	53,70 x 1,78	10MU 6350	•		55	13	b	59,99 x 2,62	10MU 7055/2
	51	6,5	a		10MU 6351			60	5,5	b	60,05 x 1,78	10MU 7060/2
	51	10	a		10MU 6351/1			60	7	b	60,05 x 1,78	10MU 7060/5
	53	5,5	a		10MU 6353/1			60	9	b	60,05 x 1,78	10MU 7060
	53	7,5	b	56,87 x 1,78	10MU 6353	•		60	11	b	60,05 x 1,78	10MU 7060/3
	53	8	a		10MU 6353/2			60	13	b	60,05 x 1,78	10MU 7060/1
53	13	a		10MU 6353/3								
64	46,3	9,5	a		10MU 6446		72	50	13	a		10MU 7250
	52	6,5	a		10MU 6452			52	13	a		10MU 7252
								62	12	a		10MU 7262
65	40	13	a		10MU 6540		73	57,1	12	a		10MU 7357
	45	11	b	50,80 x 3,53	10MU 6545	•		63	5,5	a		10MU 7363
	45	13	b	50,80 x 3,53	10MU 6545/1	•		63	7	b	66,40 x 1,78	10MU 7363/3
	50	8	a		10MU 6550/2			63	8	a		10MU 7363/1
	50	11	b	55,25 x 2,62	10MU 6550/1	•	74	34	11	a		10MU 7434
	50	12	a		10MU 6550							
	50	12,5	a		10MU 6550			75	40	11	a	
	53	6,5	a		10MU 6553		50		13	a		10MU 7550
55	5,5	a		10MU 6555/2		55	11		a		10MU 7555	
55	7	b	56,87 x 1,78	10MU 6555/4			55	13	b	61,90 x 3,53	10MU 7555/1	
55	11	b	56,87 x 1,78	10MU 6555/1	•		60	8	a		10MU 7560/1	
55	13	a		10MU 6555	•		60	11	b	64,77 x 2,62	10MU 7560/2	
							60	13	b	64,77 x 2,62	10MU 7560	
							63	10	a		10MU 7563/2	
							63	11	b	66,40 x 1,78	10MU 7563	

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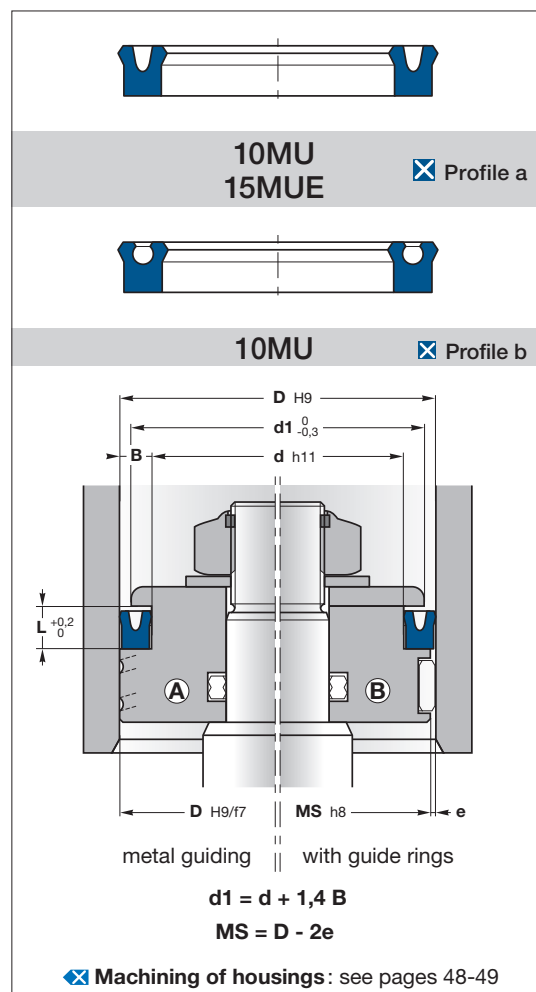
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Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	see pages 22-45

Materials see pages 10-19

Seal PU08, PU09, PU10, PU12 or PU37

Assembly see pages 54-59

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

- Good price-performance ratio
- Symmetrical seal for rods and pistons
- Excellent abrasion resistance
- For new constructions we recommend RSE shape
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5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L	X	O-ring NBR 70 Sh A	Reference	D	d	L	X	O-ring NBR 70 Sh A	Reference
75	65	5,5	a		10MU 7565/1	85	55	16	a		10MU 8555
	65	7	b	66,40 x 1,78	10MU 7565/2		60	11	a		10MU 8560/2
	65	8	a		10MU 7565/5		65	11	a		10MU 8565/1
	65	10	a		10MU 7565/4		65	13	b	71,44 x 3,53	10MU 8565
	65	11	a		10MU 7565/3		65	16	a		10MU 8565/2
	65	13	b	66,40 x 1,78	10MU 7565		70	11	a		10MU 8570
76	56	13	a		10MU 7656	70	12	b	75,87 x 2,62		10MU 8570/1
	60	13	a		10MU 7660		70	13	a		10MU 8570/2
	66	9	a		10MU 7666		73	10	a		10MU 8573
	66	13	a		10MU 7666		75	5,5	a		10MU 8575/1
77	67	11	b	72,75 x 1,78	10MU 7767/1	75	7	b	75,92 x 1,78		10MU 8575/3
	67	13	a		10MU 7767		75	8	a		10MU 8575/4
78	63	11	a		10MU 7863	75	11	a		10MU 8575/2	
	63	13	a		10MU 7863		75	13	b	75,92 x 1,78	10MU 8575
80	50	11	a		10MU 8050	90	60	16	a		10MU 9060
	55	13	a		10MU 8055		70	11	a		10MU 9070/1
	55	15	a		10MU 8055/2		70	13	b	75,79 x 3,53	10MU 9070
	60	11	b	66,27 x 3,53	10MU 8060		70	16	a		10MU 9070/2
60	13	b	66,27 x 3,53		10MU 8060/1	70	19	a		10MU 9070/3	
	16	a			10MU 8060/2		75	8,5	b	75,87 x 2,62	10MU 9075/1
	19	a			10MU 8060/3	75	11	b	75,87 x 2,62	10MU 9075	
	13	a			10MU 8064		13	b	75,87 x 2,62	10MU 9075/2	
65	8	a			10MU 8065/1		80	5,5	b	82,27 x 1,78	10MU 9080
	11	b	69,52 x 2,62		10MU 8065/3	80	7	b	82,27 x 1,78	10MU 9080/1	
	12	a			10MU 8065/2		8	a		10MU 9080/4	
	13	b	69,52 x 2,62		10MU 8065		9	b	82,27 x 1,78	10MU 9080/5	
66	11	a			10MU 8066	80	11	b	82,27 x 1,78	10MU 9080/2	
	14	a			10MU 8066/1		13	b	82,27 x 1,78	10MU 9080/3	
	5,5	b	72,75 x 1,78		10MU 8070/2	91	75	13	a		10MU 9175
	7	b	72,75 x 1,78		10MU 8070/5		76	13	a		10MU 9276
70	8	a			10MU 8070/4	95	70	11	a		10MU 9570/2
	9	b	72,75 x 1,78		10MU 8070		70	13	a		10MU 9570
	11	b	72,75 x 1,78		10MU 8070/3		75	11	a		10MU 9575/3
	13	b	72,75 x 1,78		10MU 8070/1		75	13	b	82,14 x 3,53	10MU 9575/1
82	70	10	a		10MU 8270/1	75	14,5	a		10MU 9575	
	70	13	a		10MU 8270/1		8	a		10MU 9580	
83	63	13	a		10MU 8363/1	80	8	a		10MU 9580	
	63	16	a		10MU 8363						

References followed by • exist in **15MUE**. All **15MUE** references have profile A.

References 10MU and 10MU.../ROD are identical seals.

10MU seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



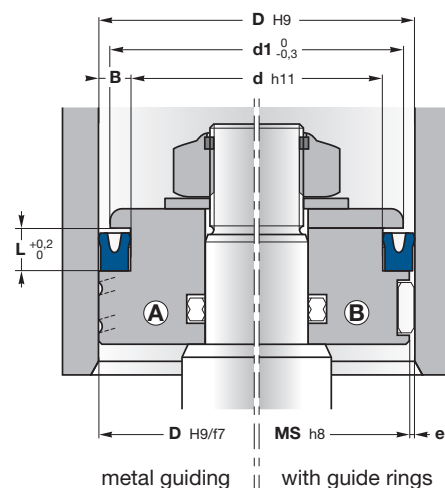
PU piston seal with symmetrical lips



Profile a



 Profile b



$$d_1 = d + 1.4 B$$

$$MS = D - 2e$$

 **Machining of housings:** see pages 48-49

Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

10MU is a high performance symmetrical lipseal which can be used in both rod and piston applications. With a wide range of dimensions, **10MU** has an efficient price-performance ratio.

They are produced in polyurethane that insures excellent wear resistance, extended service life and resistance against extrusion.

Operating conditions

 see page 8

Pressure ≤ 40 MPa

Temperature -30°C to 100°C

Speed ≤ 0.5 m/s

Fluids  **see pages 22-45**

Materials

 see pages 10-19

Seal PU08, PU09, PU10, PU12 or PU37

Assembly

 see pages 54-59

On one-piece pistons (A)

On two-piece pistons (B)

Advantages

Good price-performance ratio

Symmetrical seal for rods and pistons

Excellent abrasion resistance

For new constructions we recommend RSE shape

For MU seals with profile B, it's possible to put an O-ring between the lips of the seal to obtain the 10EUS profile, only to use in cases of single-acting applications.

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

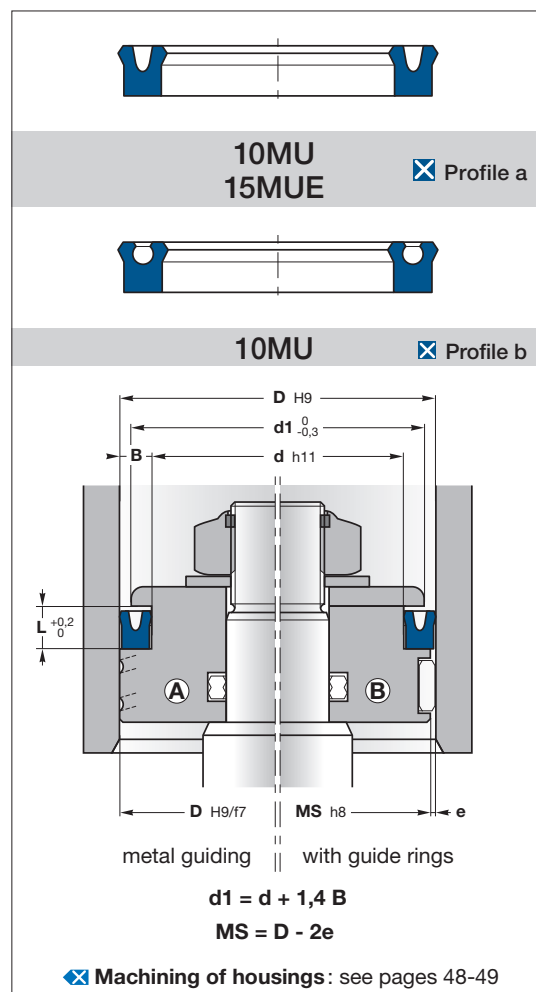
D	d	L	☒	O-ring NBR 70 Sh A	Reference	D	d	L	☒	O-ring NBR 70 Sh A	Reference	
95	80	11	a	82,22 x 2,62	10MU 9580/2	110	90	13	b	94,84 x 3,53	10MU 11090	
	80	13	b		10MU 9580/1		10MU 11090/2					
	83	10	a		10MU 9583		10MU 11090/3					
	85	5,5	a	88,62 x 1,78	10MU 9585/1	95	13	b	101,27 x 2,62	10MU 11095/1		
	85	9,5	b		10MU 9585		10MU 11095/2					
	85	13	b		10MU 9585/3		10MU 110100					
	100	70	16	a		10MU 10070	112	95	12	a		10MU 112095/1
		75	13	a		10MU 10075		10MU 112100				
		75	20	a		10MU 10075/1		10MU 112102				
80		11	a	85,32 x 3,53	10MU 10080/1	114,3	88,9	15	a		10MU 114089	
80		13	b		10MU 10080		115	90	13		a	10MU 115090
80		16	a		10MU 10080/2			90	16		a	10MU 115090/2
85		8	a	88,57 x 2,62	10MU 10085/1	95	13	b	101,19 x 3,53	10MU 115095		
85		10	b		10MU 10085/3		95	16		a	10MU 115095/2	
85		12	a		10MU 10085/2		95	19		a	10MU 115095/3	
85	13	b	88,57 x 2,62	10MU 10085	99	13	a		10MU 115099			
88	10	a		10MU 10088		100	13		b	101,27 x 2,62	10MU 115100	
90	5,5	a		10MU 10090/2			100		16		a	10MU 115100/1
90	8	a	94,97 x 1,78	10MU 10090/4	103	10	a		10MU 115103			
90	9	b		10MU 10090		117	105		10	a	10MU 117105	
90	11	a		10MU 10090/1			120		90	16	a	10MU 120090
101	90	13	b	94,97 x 1,78	10MU 10090/3	95		20	a	10MU 120095/1		
	85	13	a	10MU 10185	100	11		a	10MU 120100/1			
	86	13	a	10MU 10186	100	13	b	107,54 x 3,53	10MU 120100			
105	80	13	a	10MU 10580		100	16		a	10MU 120100/2		
	80	23	a	10MU 10580/3		100	19		a	10MU 120100/3		
	85	13	b	91,67 x 3,53	10MU 10585/1	105	9	a	10MU 120105/3			
85	16	a	10MU 10585		105		12	a	10MU 120105/1			
85	19	a	10MU 10585/2		105		16	b	107,62 x 2,62	10MU 120105/2		
90	8	a	94,92 x 2,62	10MU 10590/1	121	111	6,5	a		10MU 121111		
90	13	b		10MU 10590								
95	5,5	a		10MU 10595/1								
107	95	10	a		10MU 10795	125	100	13	b	107,54 x 3,53	10MU 125100	
							100	16	b	107,54 x 3,53	10MU 125100/1	
110	80	16	a		10MU 11080	105	11	a		10MU 125105/1		
	85	13	a	10MU 11085	105		13	b	110,72 x 3,53	10MU 125105		
	90	11	a	10MU 11090/1	105		16	b	110,72 x 3,53	10MU 125105/2		
						110	10	b	113,97 x 2,62	10MU 125110/3		
						110	13	b	113,97 x 2,62	10MU 125110/1		
						110	16	b	113,97 x 2,62	10MU 125110/2		

References followed by • exist in **15MUE**. All **15MUE** references have profile A.

References 10MU and 10MU.../ROD are identical seals.

10MU seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: **www.sealtech-business.be**

4C Single acting PISTON SEALS



10MU is a high performance symmetrical lipseal which can be used in both rod and piston applications. With a wide range of dimensions, **10MU** has an efficient price-performance ratio.

They are produced in polyurethane that insures excellent wear resistance, extended service life and resistance against extrusion.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal	PU08, PU09, PU10, PU12 or PU37
------	--------------------------------

Assembly see pages 54-59

- On one-piece pistons Ⓐ
- On two-piece pistons Ⓑ

Advantages

- Good price-performance ratio
- Symmetrical seal for rods and pistons
- Excellent abrasion resistance
- For new constructions we recommend RSE shape
- For MU seals with profile B, it's possible to put an O-ring between the lips of the seal to obtain the 10EUS profile, only to use in cases of single-acting applications.

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

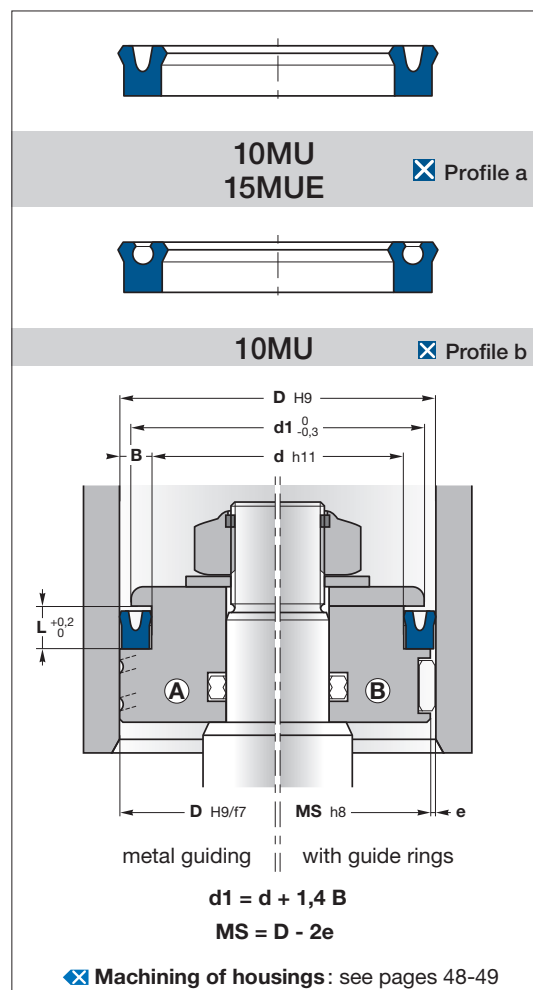
Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L	☒	O-ring NBR 70 Sh A	Reference	D	d	L	☒	O-ring NBR 70 Sh A	Reference		
130	100	16	a	117,07 x 3,53	10MU 130100/1	160	130	19	a	145,64 x 3,53	10MU 160130		
	105	13	a		10MU 130105		135	13	a		10MU 160135		
	110	11	a		10MU 130110/2		135	16	a		10MU 160135/1		
	110	13	a		10MU 130110/1		140	11	a		10MU 160140		
	110	16	b		10MU 130110		140	13	a		10MU 160140/2		
	110	19	a		10MU 130110/3		140	16	b		10MU 160140/1		
	115	8	a	120,24 x 3,53	10MU 130115	165	140	16	a	151,99 x 3,53	10MU 165140/1		
	115	11	a		10MU 130115/3		145	16	b		10MU 165145		
	115	12	a		10MU 130115/1		170	145	20		a	10MU 170145/1	
	115	16	a		10MU 130115/2			150	10		a	10MU 170150	
	118	11	a		10MU 130118			150	16		b	10MU 170150/2	
	120	15	a		10MU 130120			155	12		a	10MU 170155	
135	110	16	a	10MU 135110/1	158	10		a	10MU 170158				
	115	16	b	10MU 135115	175	160		12	a	10MU 175160			
	120	16	a	10MU 135120		180	160	16	b	164,69 x 3,53	10MU 180160		
	123	10	a	10MU 135123			185	165	16	a	10MU 185165		
	137	125	10	a			10MU 137125	170	12	a	10MU 185170		
		140	110	16			a	10MU 140110	190	170	13	b	177,39 x 3,53
115			16	a			10MU 140115/1	170		16	b	177,39 x 3,53	10MU 190170
120			11	a	10MU 140120/1		195	180		12	a	10MU 195180	
120			13	a	10MU 140120	200		170		16	a	10MU 200170	
120			16	b	126,59 x 3,53			170		19	a	10MU 200170/1	
125	12		b	126,67 x 2,62	175			16		b	183,74 x 3,53	10MU 200175/1	
125	16	b	126,67 x 2,62	10MU 140125/2	220			180	13	a	10MU 200180/2		
145	125	13	a	10MU 145125/2				180	16	b	183,74 x 3,53	10MU 200180	
	125	16	b	129,77 x 3,53			10MU 145125	188	10	a	10MU 200188		
	125	19	a	10MU 145125/1		225	190	23	a	10MU 220190			
	130	13		10MU 145130			200	13	b	10MU 220200			
	130	16	a	10MU 145130/2			200	16	a	10MU 220200/1			
	150	130	16	b	136,12 x 3,53		10MU 150130/1	240	200	19	b	209,14 x 3,53	10MU 225200/2
135		16	a	10MU 150135/1	210		18		a	10MU 240210			
138		10	a	10MU 150138	250		220		16	a	10MU 250220/2		
155		125	16	a		10MU 155125	220		19	b	215,27 x 5,34	10MU 250220	
		130	20	a		10MU 155130/1	220		22	a	10MU 250220/1		
		135	16	a		10MU 155135	230		16	a	10MU 250230		
	270	250	16	a		10MU 270250							

References followed by • exist in **15MUE**. All **15MUE** references have profile A.

References 10MU and 10MU.../ROD are identical seals.

10MU seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
 For prices and availability: www.sealtech-business.be



10MU is a high performance symmetrical lipseal which can be used in both rod and piston applications. With a wide range of dimensions, **10MU** has an efficient price-performance ratio.

They are produced in polyurethane that insures excellent wear resistance, extended service life and resistance against extrusion.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal	PU08, PU09, PU10, PU12 or PU37
------	--------------------------------

Assembly see pages 54-59

- On one-piece pistons **A**
- On two-piece pistons **B**

Advantages

- Good price-performance ratio
- Symmetrical seal for rods and pistons
- Excellent abrasion resistance
- For new constructions we recommend RSE shape
- For MU seals with profile B, it's possible to put an O-ring between the lips of the seal to obtain the 10EUS profile, only to use in cases of single-acting applications.

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L		O-ring NBR 70 Sh A	Reference
280	250	19	a		10MU 280250
290	270	18	a		10MU 290270/1
300	270	16	a		10MU 300270
	280	16	a		10MU 300280
320	290	19	a		10MU 320290
	300	16	a		10MU 320300 •
340	320	16	a		10MU 340320 •
360	340	16	a		10MU 360340
380	360	16	a		10MU 380360 •

Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

References followed by • exist in **15MUE**. All **15MUE** references have profile A.

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For prices and availability: www.sealtech-business.be

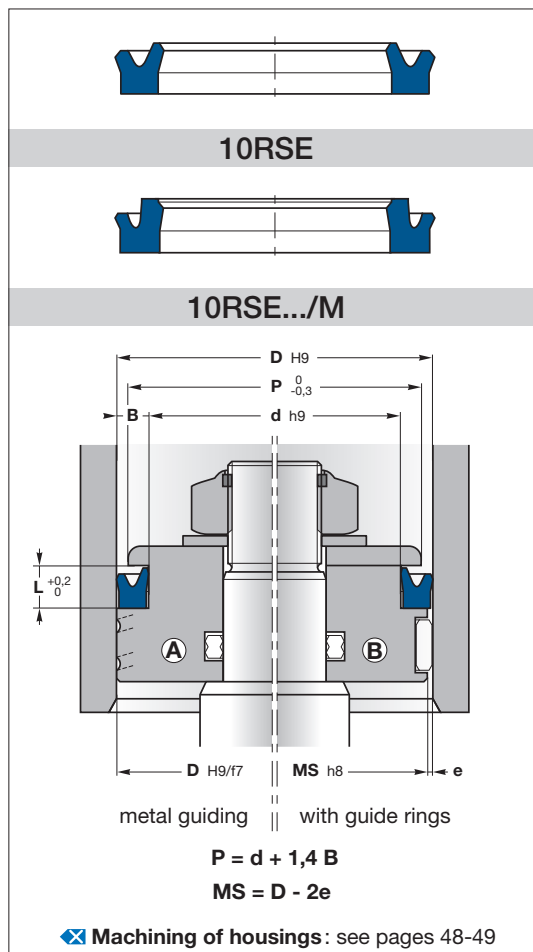


10RSE

PU single acting piston seal with asymmetrical lips



SEALTECH
Hydraulic Seals Technology



10RSE is designed with a shorter and stronger outer sealing lip to concentrate the load against the dynamic surface.

The sealing lip on the static side is longer to provide a wide contact area and more flexible, therefore more sensitive to pressure fluctuations.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal	PU09 or PU10
------	--------------

Assembly see pages 54-59

- On one-piece pistons **A**
- On two-piece pistons **B**

Advantages

- Excellent abrasion resistance
- Efficient sealing
- Simple groove design

Please contact us for applications approaching maximum values.

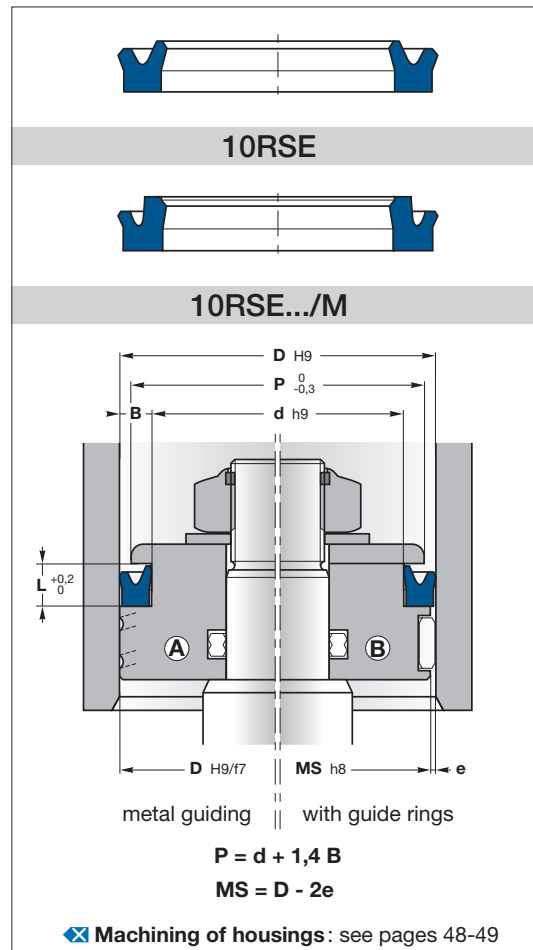
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	e (mm)	
	10RSE	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L	Reference
14	8	6,8	10RSE 1408
16	10	6,5	10RSE 1610/1
	10	9	10RSE 1610
20	12	5,8	10RSE 2012/1
	12	7,5	10RSE 2012
22	12	9	10RSE 2212
25	10	11	10RSE 2510
	15	9	10RSE 2515
30	15	11	10RSE 3015
	20	9	10RSE 3020
	22	7	10RSE 3022
32	22	9	10RSE 3222/1
	22	11	10RSE 3222
	26	6	10RSE 3226
34	22	10	10RSE 3422
	28	4	10RSE 3428
35	20	11	10RSE 3520
	22	11	10RSE 3522/1
	25	9	10RSE 3525
	27	11	10RSE 3527
37	21	13	10RSE 3721
38	31	5,2	10RSE 3831
40	25	11	10RSE 4025
	30	7,5	10RSE 4030/1
	30	11	10RSE 4030
	32	6,5	10RSE 4032/2
	32	9	10RSE 4032
	33	9	10RSE 4033
42	32	11	10RSE 4232
44	20	12	10RSE 4420
	25	12	10RSE 4425
44,45	34,92	8,7	10RSE 4434
45	30	11	10RSE 4530
50	30	13	10RSE 5030
	32	11	10RSE 5032
	35	9,5	10RSE 5035/1
	35	11	10RSE 5035
	40	5,5	10RSE 5040/1
	40	6	10RSE 5040/1
	40	8	10RSE 5040/4

D	d	L	Reference
50	40	9	10RSE 5040/3
	40	11	10RSE 5040
	42	6	10RSE 5042/2
	42	9	10RSE 5042/1
	42	11	10RSE 5042
52	42	6,3	10RSE 5242/2
	42	10,6	10RSE 5242
55	40	11	10RSE 5540
60	40	13	10RSE 6040
	40	14,5	10RSE 6040/1
	45	11	10RSE 6045
	50	5,5	10RSE 6050/1
	50	7	10RSE 6050/3
	50	8	10RSE 6050
	50	11	10RSE 6050/2
63	43	13	10RSE 6343
	45	11	10RSE 6345
	45	13	10RSE 6345/2
	48	9,5	10RSE 6348/3
	48	11	10RSE 6348/1
	48	13	10RSE 6348
	53	8	10RSE 6353
	53	13	10RSE 6353/1
65	45	13	10RSE 6545/1
	45	14,5	10RSE 6545
	50	11	10RSE 6550
	55	11	10RSE 6555/1
70	50	13	10RSE 7050
	50	14,5	10RSE 7050/1
	50	16	10RSE 7050/2
	55	10,5	10RSE 7055/1
	55	13	10RSE 7055
	60	7	10RSE 7060/3
	60	8	10RSE 7060
	60	13	10RSE 7060/1
	60	14,5	10RSE 7060/2
	62	8,5	10RSE 7062
75	50	15	10RSE 7550
	55	14,5	10RSE 7555
	65	5,5	10RSE 7565/1
	65	7,5	10RSE 7565/3
	65	8	10RSE 7565/4
	65	11	10RSE 7565/2
80	60	13	10RSE 8060
	60	14,5	10RSE 8060/1
	65	13	10RSE 8065
	68	9,5	10RSE 8068
	70	8	10RSE 8070
	70	13	10RSE 8070/1
	72	13	10RSE 8072



10RSE is designed with a shorter and stronger outer sealing lip to concentrate the load against the dynamic surface.

The sealing lip on the static side is longer to provide a wide contact area and more flexible, therefore more sensitive to pressure fluctuations.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal	PU09 or PU10
------	--------------

Assembly see pages 54-59

- On one-piece pistons **A**
- On two-piece pistons **B**

Advantages

- Excellent abrasion resistance
- Efficient sealing
- Simple groove design

Please contact us for applications approaching maximum values.

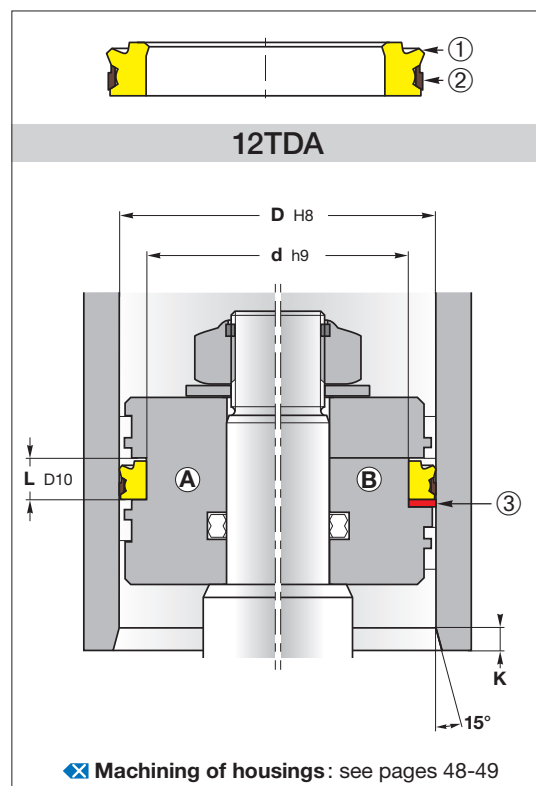
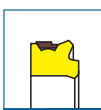
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the material.

Pressure (MPa)	e (mm)	
	10RSE	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L	Reference
85	65	13	10RSE 8565/2
	65	14,5	10RSE 8565
	70	13	10RSE 8570
	75	11	10RSE 8575/1
	75	13	10RSE 8575
90	70	13	10RSE 9070
	70	14,5	10RSE 9070/1
	75	11	10RSE 9075/1
	75	13	10RSE 9075
	80	5,5	10RSE 9080/2
95	80	11	10RSE 9080/1
	80	13	10RSE 9580
	85	7,5	10RSE 9585/2
	85	8	10RSE 9585
	85	9,5	10RSE 9585/1
100	85	14,5	10RSE 9585/3
	80	11	10RSE 10080/2
	80	13	10RSE 10080
	80	14,5	10RSE 10080/1
	85	10	10RSE 10085/1
105	85	13	10RSE 10085
	88	9,5	10RSE 10088
	90	8	10RSE 10090
	90	13	10RSE 10590
110	90	13	10RSE 11090
	95	13	10RSE 11095
	100	8	10RSE 110100

D	d	L	Reference
115	100	11,5	10RSE 115100
	100	13	10RSE 115100/2
120	100	13	10RSE 120100
	103	17	10RSE 120103
	105	13	10RSE 120105
125	100	16	10RSE 125100/1
	105	13	10RSE 125105
	105	16	10RSE 125105/1
	110	11	10RSE 125110
130	110	13	10RSE 130110
	110	16	10RSE 130110/1
140	120	13	10RSE 140120
150	125	14,5	10RSE 150125
	130	16	10RSE 150130
160	140	14,5	10RSE 160140
170	150	16	10RSE 170150
180	160	14,5	10RSE 180160
	160	16	10RSE 180160/M
200	175	17	10RSE 200175
220	200	16	10RSE 220200/M
250	220	19	10RSE 250220/M
280	250	19	10RSE 280250



Hunger® 12TDA tandem seal for outside sealing is used to seal pistons, plungers and accumulators. It can be applied with mineral oils and in modified form also with water base fluids, fire resistant fluids, and compressed air.

12TDA seal consists of 2 parts, an elastic ring of PU with a sealing lip and a slide ring of abrasion resistant PTFE-Bronze-compound with a sealing edge.

Prior to fitting, the sealing lip protrudes beyond the nominal diameter of the seal and is pressed against the cylinder wall after fitting. Thus **effective sealing** is provided even at zero pressure.

Operating conditions see page 8

Pressure	
Construction A	≤ 36 MPa
Construction B	≤ 63 MPa
Temperature	-35°C to 100°C
Speed	≤ 1 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal ①	PU
Dynamic sealing element ②	PTFE bronze compound
Anti-extrusion ring ③	POM or PA

Assembly see pages 54-59

On one A or two-piece B pistons

Advantages

- Efficient sealing even at low pressures
- Compact seal
- Easy to assemble
- Excellent abrasion resistance
- Minimum friction level
- Long service life

Please contact us for applications approaching maximum values.

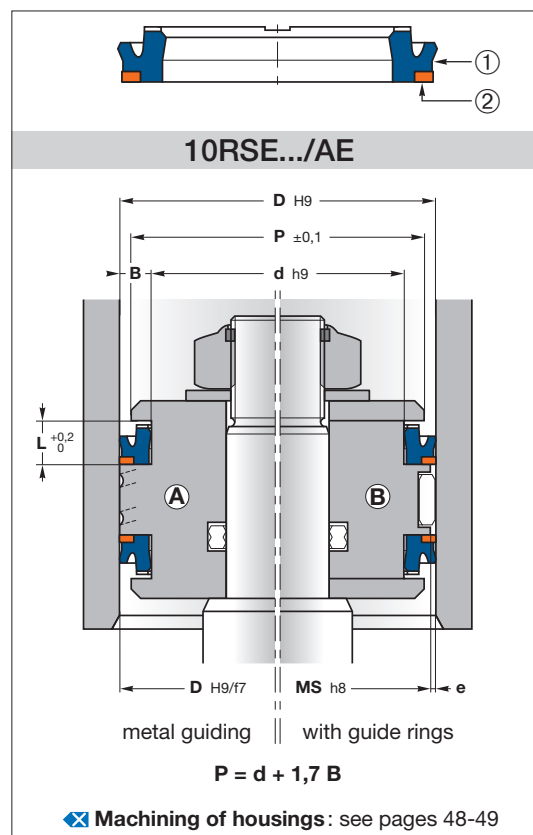
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	K	HUNGER reference	Reference	D	d	L	K	HUNGER reference	Reference
40	32	7,5	6	010102	12TDA 40	185	165	17	10	010138	12TDA 185
43	35	7,5	6	010104	12TDA 43	190	170	17	10	010139	12TDA 190
44	36	7,5	6	010105	12TDA 44	200	180	17	10	010140	12TDA 200
48	40	7,5	6	010107	12TDA 48	210	190	17	10	010141	12TDA 210
50	42	7,5	6	010108	12TDA 50	220	200	17	10	010142	12TDA 220
55	45	7,5	6	010109	12TDA 55	240	220	17	10	010145	12TDA 240
60	45	13	6	010111	12TDA 60	245	225	17	10	010146	12TDA 245
63	48	13	6	010112	12TDA 63	250	230	17	10	010147	12TDA 250
70	55	13	6	010114	12TDA 70	260	240	17	10	010148	12TDA 260
75	60	13	6	010115	12TDA 75	270	250	17	10	010150	12TDA 270
78	63	13	6	010116	12TDA 78	280	260	17	10	010152	12TDA 280
80	65	11	6	016328	12TDA 80/1	300	280	17	10	010154	12TDA 300
80	65	13	6	010117	12TDA 80	310	290	17	10	010155	12TDA 310
85	70	13	6	010118	12TDA 85	320	300	17	10	010156	12TDA 320
87	72	13	7	010119	12TDA 87	350	320	21	15	010158	12TDA 350
90	75	13	7	010120	12TDA 90	360	330	21	15	071093	12TDA 360
95	80	13	7	010121	12TDA 95	380	350	21	15	010160	12TDA 380
100	85	13	7	010122	12TDA 100	390	360	21	15	010161	12TDA 390
105	90	13	7	010123	12TDA 105	410	380	21	15	010163	12TDA 410
110	95	13	7	010124	12TDA 110	430	400	21	15	010166	12TDA 430
115	100	13	7	010125	12TDA 115	445	415	21	15	010167	12TDA 445
120	105	13	7	010126	12TDA 120	450	420	21	15	010168	12TDA 450
125	110	13	7	010127	12TDA 125	455	425	21	15	010169	12TDA 455
130	115	13	7	010128	12TDA 130	480	450	21	15	010170	12TDA 480
140	120	13	7	010130	12TDA 140	510	480	21	15	010172	12TDA 510
145	125	13	10	010131	12TDA 145	540	510	21	15	010173	12TDA 540
150	130	13	10	010132	12TDA 150	590	560	21	15	010175	12TDA 590
160	140	13	10	010134	12TDA 160	600	570	21	15	010176	12TDA 600
170	150	17	10	010136	12TDA 170	640	610	21	15	010178	12TDA 640
180	160	17	10	010137	12TDA 180	670	640	21	15	010180	12TDA 670

Further dimensions on request

12TDA seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



Pressure (MPa)	e (mm)	
	10RSE.../AE	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,6	≤ 0,8
10	≤ 0,6	≤ 0,8
20	≤ 0,4	≤ 0,6
30	≤ 0,3	≤ 0,4
40	≤ 0,2	≤ 0,3
50	≤ 0,1	≤ 0,15

10RSE.../AE is designed with a shorter and stronger outer sealing lip to concentrate the load against the dynamic surface.

The sealing lip on the static side is longer to provide a wide contact area and more flexible, therefore more sensitive to pressure fluctuations.

The anti-extrusion ring enable **higher pressure** conditions and greater extrusion gaps.

Operating conditions see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal ① / Anti-extrusion ring ②	
	PU10 / POM24
	PU13 / POM24
	PU32 / POM84

Assembly see pages 54-59

- On one-piece pistons ①
- On two-piece pistons ②
- Back-to-back mounting on double-acting cylinders only on short-stroke and/or slow-moving cylinders

Advantages

- Excellent abrasion resistance
- Efficient sealing
- Simple groove design
- High extrusion resistance

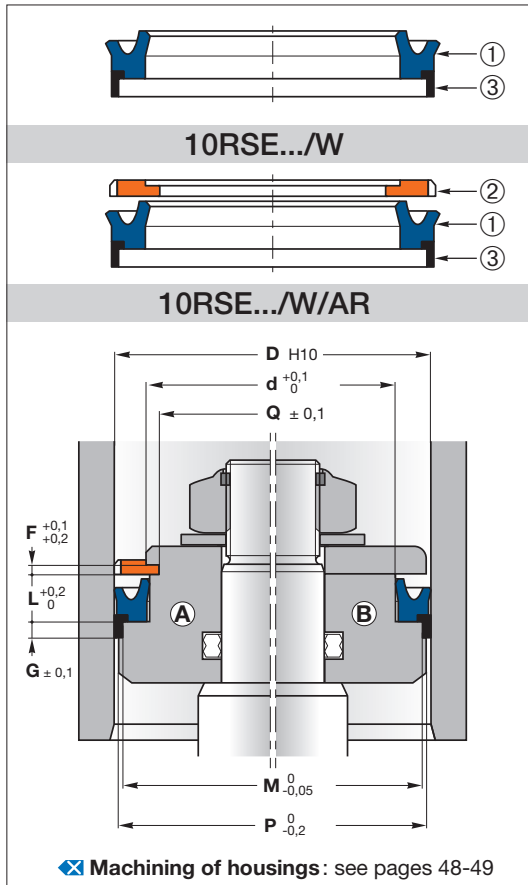
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	ISO 5597	Reference
40	25	9,5	•	10RSE 4025/AE
45	30	9,5	•	10RSE 4530/AE
	35	9,5	•	10RSE 4535/AE
50	35	9,5	•	10RSE 5035/AE
55	40	9,5	•	10RSE 5540/AE
60	45	9,5	•	10RSE 6045/AE
63	48	9,5	•	10RSE 6348/AE
65	50	9,5	•	10RSE 6550/AE
70	50	12,5	•	10RSE 7050/AE
	55	9,5	•	10RSE 7055/AE
75	55	12,5	•	10RSE 7555/AE
80	60	12,5	•	10RSE 8060/AE
	65	9,5	•	10RSE 8065/AE
85	70	9,5	•	10RSE 8570/AE
90	70	12,5	•	10RSE 9070/AE
	75	9,5	•	10RSE 9075/AE
100	80	12,5	•	10RSE 10080/AE
	85	9,5	•	10RSE 10085/AE
105	85	12,5	•	10RSE 10585/AE

D	d	L	ISO 5597	Reference
110	90	12,5	•	10RSE 11090/AE
115	95	12,5	•	10RSE 11595/AE
120	105	9,5	•	10RSE 120105/AE
125	100	16	•	10RSE 125100/AE
	105	12,5	•	10RSE 125105/AE
130	110	12,5	•	10RSE 130110/AE
140	115	16	•	10RSE 140115/AE
	120	12,5	•	10RSE 140120/AE
150	120	19	•	10RSE 150120/AE
160	130	20	•	10RSE 160130/AE
	140	12,5	•	10RSE 160140/AE
170	150	12,5	•	10RSE 170150/AE
180	150	19	•	10RSE 180150/AE
	160	12,5	•	10RSE 180160/AE
190	170	12,5	•	10RSE 190170/AE
200	170	20	•	10RSE 200170/AE
	175	15,5	•	10RSE 200175/AE
220	200	15,5	•	10RSE 220200/AE
250	220	19	•	10RSE 250220/AE
	225	15,5	•	10RSE 250225/AE



✕ Machining of housings: see pages 48-49

10RSE.../W/AR is made of a sealing element in polyurethane, a guide ring and a circlips in POM.

The sealing part is designed with a shorter and stronger outer sealing lip to concentrate the load against the dynamic surface. The sealing lip on the static side is more flexible and longer to provide a wide contact area, therefore more sensitive to pressure fluctuations.

The POM ring guides the piston in the cylinder tube and supports **radial loads**. The retaining ring helps the assembly in the open groove of the piston seal, especially those with a large radial section

Operating conditions ✕ see page 8

Pressure	≤ 40 MPa
Temperature	-40°C to 100°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Seal ①	PU10
Circlips AR ②	POM24
Guide ring ③	POM/GF1

Assembly ✕ see pages 54-59

- On one-piece pistons A
- On two-piece pistons B

Advantages

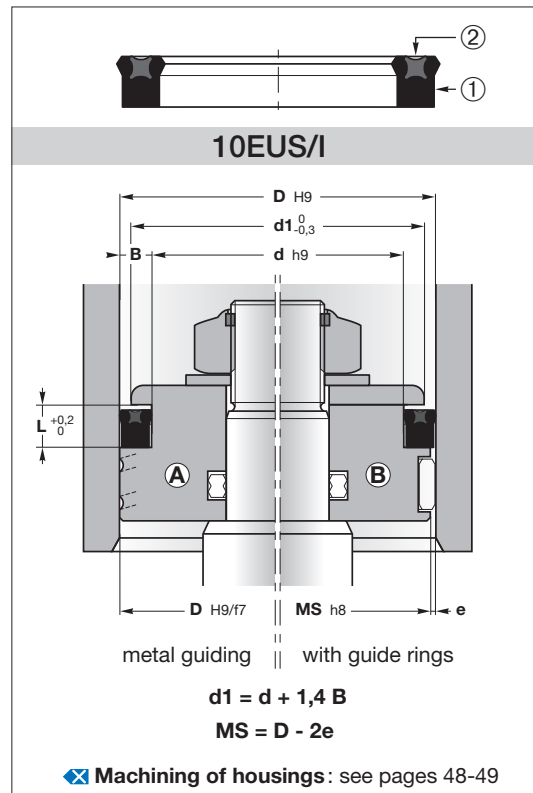
- Excellent abrasion resistance
- Efficient sealing
- Guiding and sealing are performed by the seal
- Easy installation

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	F	M	P	Q	Reference
32	20	9	6,35		28,5	31		10RSE 3220/W
	20	9	6,35	3,1	28,5	31	15,8	10RSE 3220/W/AR
35	22	10	6,35	3,1	31,4	34	17,8	10RSE 3522/W/AR
40	25	9,5	6,35		35,4	39		10RSE 4025/W
	26	9,4	6,35	3,1	35,4	39	21,6	10RSE 4026/W/AR
45	30	10	6,35		40,4	44		10RSE 4530/W
	30	10	6,35	3,1	40,4	44	25,8	10RSE 4530/W/AR
	35	9,5	6,35		40,4	44		10RSE 4535/W
50	30	14,5	6,35		44,3	49		10RSE 5030/W
	30	14,5	6,35	3,35	44,3	49	25,8	10RSE 5030/W/AR
	35	11	6,35		45,35	49		10RSE 5035/W
	40	11	6,35		45,4	49		10RSE 5040/W
55	40	11	6,35		50,35	54		10RSE 5540/W
	40	11	6,35	3,1	50,36	54	35,8	10RSE 5540/W/AR
60	40	14,5	6,35		55,4	59		10RSE 6040/W
	40	14,5	6,35	3,35	54,2	59	36,1	10RSE 6040/W1/AR
	45	11	6,35		55,2	59		10RSE 6045/W
	45	11	6,35		54,2	59		10RSE 6045/W1
63	45	11	6,35		58,4	62		10RSE 6345/W
	45	11	6,35	3,1	58,4	62	40,84	10RSE 6345/W/AR
65	50	11	6,35		60,4	64		10RSE 6550/W
70	50	14,5	6,35		64,2	69		10RSE 7050/W
	50	14,5	6,35	3,35	64,2	69	45,84	10RSE 7050/W/AR
80	60	13	6,35		74,15	79		10RSE 8060/W
	60	14,5	6,35		74,15	79		10RSE 8060/W1
90	70	13	6,35		84,15	89		10RSE 9070/W
	70	14,5	6,35		84,15	89		10RSE 9070/W1
	70	14,5	6,35	3,35	84,15	89	66,1	10RSE 9070/W1/AR
100	80	14,5	6,35		93,15	99		10RSE 10080/W
	80	14,5	6,35			99		10RSE 10080/W1
110	95	13	6,35		103,1	109		10RSE 11095/W
120	100	14,5	6,35		113,1	119		10RSE 120100/W
	100	14,5	6,35		114,1	119		10RSE 120100/W1
140	120	12,5	6,35		133	139		10RSE 140120/W



10EUS/I is the natural further development of the U-ring. This profile combines the advantage of a highly elastic rubber and the abrasion resistance of polyurethane. The energising ring guarantees good sealing performance also **at low pressure**. This performance will increase with the pressure.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal ①	PU45
Energising ring ②	NBR

Assembly see pages 54-59

- On one-piece pistons (A)
- On two-piece pistons (B)

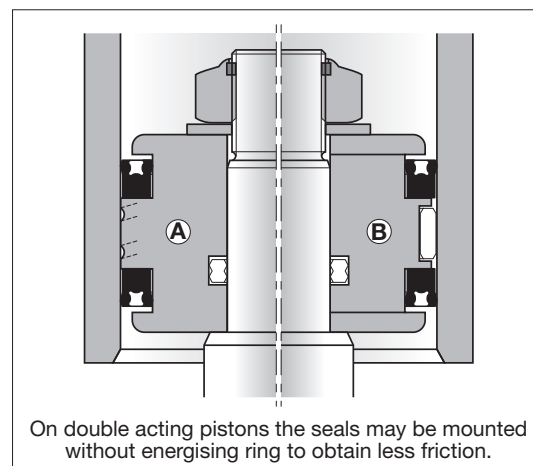
Advantages

- Efficient sealing at high and low pressure
- Excellent abrasion resistance
- Good price-performance ratio
- Easy installation on monobloc pistons
- Good resistance to clearance extrusion
- Very low compression set due to the Quad-Ring®

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.



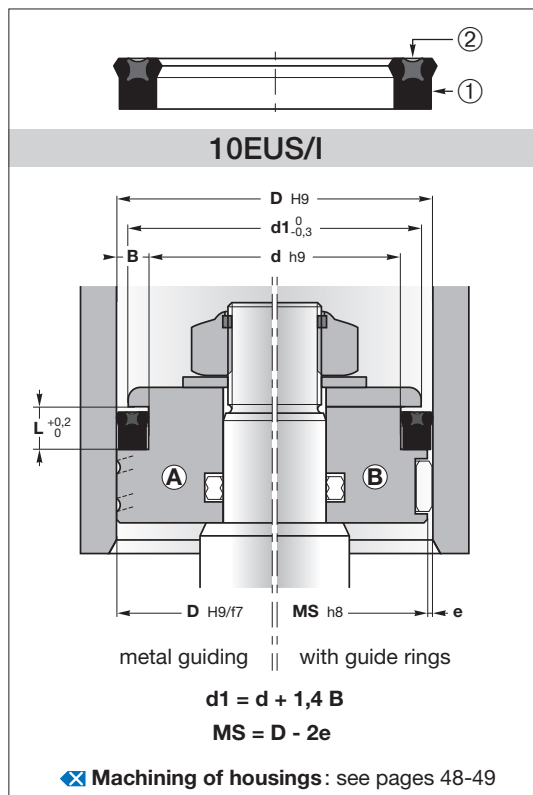
Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L	Reference
12,7	6,35	3,5	10EUS/I 025050
15,88	9,52	3,5	10EUS/I 037062
19,05	9,52	5,3	10EUS/I 037075
	12,7	3,5	10EUS/I 050075
22,22	15,88	3,5	10EUS/I 062087
25,4	12,7	7	10EUS/I 050100/1
	12,7	10,5	10EUS/I 050100
	19,05	3,5	10EUS/I 075100/2
	19,05	5,3	10EUS/I 075100
	19,05	7	10EUS/I 075100/1
26,99	20,63	3,5	10EUS/I 081106/1
	20,63	5,3	10EUS/I 081106
28,57	19,05	8,7	10EUS/I 075112
	22,22	3,5	10EUS/I 087112/1
	22,22	7	10EUS/I 087112
30,16	23,81	7	10EUS/I 093118
31,75	19,05	7	10EUS/I 075125
	25,4	3,5	10EUS/I 100125/1
	25,4	5,3	10EUS/I 100125
34,93	25,4	5,3	10EUS/I 100137/1
	25,4	8,7	10EUS/I 100137
	28,57	3,5	10EUS/I 112137
38,1	25,4	7	10EUS/I 100150
	28,57	8,7	10EUS/I 112150
	31,75	5,3	10EUS/I 125150
	31,75	7	10EUS/I 125150/1
39,68	33,33	5,3	10EUS/I 131156
41,27	31,75	5,3	10EUS/I 125162/3
	31,75	7	10EUS/I 125162
	31,75	8,7	10EUS/I 125162/1
	31,75	10,5	10EUS/I 125162/2
	34,92	5,3	10EUS/I 137162
44,45	25,4	10,5	10EUS/I 100175
	31,75	7	10EUS/I 125175
	31,75	10,5	10EUS/I 125175/1
	34,92	7	10EUS/I 137175/2
	34,92	8,7	10EUS/I 137175
	34,92	10,5	10EUS/I 137175/1
47,62	31,75	8,7	10EUS/I 125187
	31,75	10,5	10EUS/I 125187/1
	34,92	10,5	10EUS/I 137187

D	d	L	Reference
47,62	38,1	5,3	10EUS/I 150187/1
	38,1	7	10EUS/I 150187
	38,1	10,5	10EUS/I 150187/2
50,8	31,75	10,5	10EUS/I 125200
	38,1	7	10EUS/I 150200
	38,1	10,5	10EUS/I 150200/1
	41,27	10,5	10EUS/I 162200
53,97	44,45	5,3	10EUS/I 175212/3
	44,45	7	10EUS/I 175212
	44,45	8,7	10EUS/I 175212/2
	44,45	10,5	10EUS/I 175212/1
57,15	44,45	10,5	10EUS/I 175225
	47,62	5,3	10EUS/I 187225
	47,62	10,5	10EUS/I 187225/1
60,32	44,45	14	10EUS/I 175237
	47,62	10,5	10EUS/I 187237
	50,8	5,3	10EUS/I 200237/2
	50,8	8,7	10EUS/I 200237
	50,8	10,5	10EUS/I 200237/1
63,5	47,62	10,5	10EUS/I 187250
	50,8	7	10EUS/I 200250/1
	50,8	10,5	10EUS/I 200250
	53,97	7	10EUS/I 212250
	53,97	10,5	10EUS/I 212250/1
66,67	47,62	10,5	10EUS/I 187262
	50,8	10,5	10EUS/I 200262
	53,97	10,5	10EUS/I 212262
	57,15	5,3	10EUS/I 225262/2
	57,15	8,7	10EUS/I 225262
	57,15	10,5	10EUS/I 225262/1
69,85	53,97	10,5	10EUS/I 212275
	57,15	8,7	10EUS/I 225275/1
	57,15	10,5	10EUS/I 225275
	60,32	5,3	10EUS/I 237275
	60,32	10,5	10EUS/I 237275/1
73,02	57,15	10,5	10EUS/I 225287
	60,32	10,5	10EUS/I 237287
	63,5	8,7	10EUS/I 250287
	63,5	10,5	10EUS/I 250287/1
76,2	63,5	7	10EUS/I 250300
	63,5	10,5	10EUS/I 250300/1
	66,67	5,3	10EUS/I 262300
	66,67	10,5	10EUS/I 262300/1
79,37	63,5	14	10EUS/I 250312
	66,67	10,5	10EUS/I 262312

References 10EUS/I and 10EUS/I.../P are identical seals.

10EUS/I seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be



10EUS/I is the natural further development of the U-ring. This profile combines the advantage of a highly elastic rubber and the abrasion resistance of polyurethane. The energising ring guarantees good sealing performance also **at low pressure**. This performance will increase with the pressure.

Operating conditions see page 8

Pressure	≤ 40 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Seal ①	PU45
Energising ring ②	NBR

Assembly see pages 54-59

- On one-piece pistons (A)
- On two-piece pistons (B)

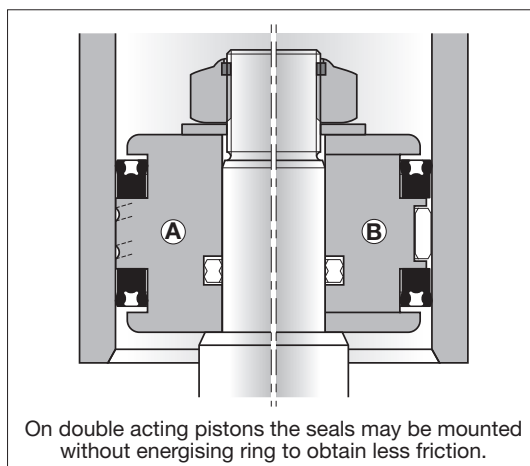
Advantages

- Efficient sealing at high and low pressure
- Excellent abrasion resistance
- Good price-performance ratio
- Easy installation on monobloc pistons
- Good resistance to clearance extrusion
- Very low compression set due to the Quad-Ring®

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.



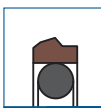
Pressure (MPa)	e (mm)	
	D ≤ 60 mm	D > 60 mm
5	≤ 0,4	≤ 0,5
10	≤ 0,3	≤ 0,4
20	≤ 0,2	≤ 0,3
30	≤ 0,15	≤ 0,2
40	≤ 0,1	≤ 0,15

D	d	L	Reference
82,55	63,5	10,5	10EUS/I 250325/1
	63,5	17,5	10EUS/I 250325
	69,85	10,5	10EUS/I 275325
85,72	73,02	10,5	10EUS/I 287337
	76,2	5,3	10EUS/I 300337
	76,2	10,5	10EUS/I 300337/1
88,9	69,85	10,5	10EUS/I 275350
	69,85	17,5	10EUS/I 275350/1
	73,02	14	10EUS/I 287350
	76,2	10,5	10EUS/I 300350
	79,37	10,5	10EUS/I 312350
92,07	76,2	10,5	10EUS/I 300362
	76,2	14	10EUS/I 300362/1
	79,37	10,5	10EUS/I 312362
95,25	76,2	17,5	10EUS/I 300375
	79,37	14	10EUS/I 312375
	82,55	10,5	10EUS/I 325375
	82,55	14	10EUS/I 325375/1
98,42	85,72	10,5	10EUS/I 337387
	88,9	10,5	10EUS/I 350387
101,6	82,55	10,5	10EUS/I 325400/1
	82,55	14	10EUS/I 325400
	88,9	10,5	10EUS/I 350400
104,78	88,9	14	10EUS/I 350412
107,95	88,9	10,5	10EUS/I 350425/1
	88,9	14	10EUS/I 350425
	88,9	17,5	10EUS/I 350425/2
	95,25	10,5	10EUS/I 375425
	95,25	15,7	10EUS/I 375425/1
114,3	88,9	21	10EUS/I 350450
	95,25	14	10EUS/I 375450
	101,6	10,5	10EUS/I 400450
	101,6	15,7	10EUS/I 400450/1
117,48	101,6	15,7	10EUS/I 400462
120,65	101,6	14	10EUS/I 400475
	107,95	10,5	10EUS/I 425475
	107,95	15,7	10EUS/I 425475/1
127	101,6	21	10EUS/I 400500
	107,95	17,5	10EUS/I 425500
	111,13	14	10EUS/I 437500
	114,3	10,5	10EUS/I 450500

D	d	L	Reference
133,35	114,3	17,5	10EUS/I 450525
	120,65	10,5	10EUS/I 475525
139,7	114,3	21	10EUS/I 450550
	127	10,5	10EUS/I 500550
146,05	127	17,5	10EUS/I 500575
	133,35	10,5	10EUS/I 525575
149,1	136,52	7	10EUS/I 537587
152,4	127	21	10EUS/I 500600
	133,35	17,5	10EUS/I 525600
	139,7	10,5	10EUS/I 550600
158,75	139,7	17,5	10EUS/I 550625
165,1	139,7	21	10EUS/I 550650
	152,4	15,7	10EUS/I 600650
171,45	152,4	14	10EUS/I 600675/1
	152,4	17,5	10EUS/I 600675
	158,75	14	10EUS/I 625675
177,8	152,4	21	10EUS/I 600700
	158,75	10,5	10EUS/I 625700/1
	158,75	17,5	10EUS/I 625700
190,5	161,92	8,7	10EUS/I 637700
	165,1	15,7	10EUS/I 650700
184,15	165,1	10,5	10EUS/I 650725
	165,1	17,5	10EUS/I 650725/1
	171,45	10,5	10EUS/I 675725
190,5	165,1	21	10EUS/I 650750
	177,8	15,7	10EUS/I 700750
196,85	177,8	14	10EUS/I 700775
	177,8	17,5	10EUS/I 700775/1
203,2	177,8	14	10EUS/I 700800/1
	177,8	21	10EUS/I 700800
	190,5	15,7	10EUS/I 750800
209,55	190,5	14	10EUS/I 750825
215,9	203,2	15,7	10EUS/I 800850
228,6	203,2	21	10EUS/I 800900
	215,9	15,7	10EUS/I 850900
241,3	215,9	21	10EUS/I 850950

References 10EUS/I and 10EUS/I.../P are identical seals.

10EUS/I seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: www.sealtech-business.be

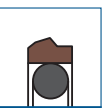


10E/GR...B

PTFE single acting piston seal with energising ring



SEALTECH
Hydraulic Seals Technology



10E/GR-L: Light serie 10E/GR-P: Heavy serie

10E/GR...B is a single acting piston seal consisting of a seal ring in PTFE which assures low friction and high speed performance.

The O-ring works as an energising ring and maintains the pressure of the sealing lip against the sliding surface. PTFE has also an excellent chemical resistance, which enables by **changing the O-ring material** (except mineral oils) the use with different type of oils.

Operating conditions see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	 see pages 22-45

Materials see pages 10-19

Dynamic sealing element ①	PT55
Energising element ②	NBR 70 Sh A

Assembly see pages 54-59

On one-piece pistons

Advantages

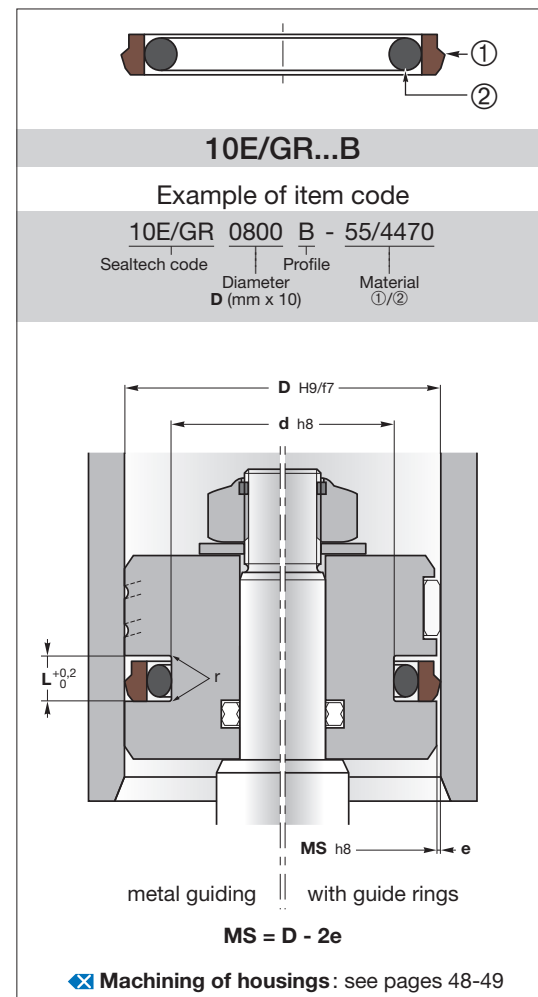
- High speed performance
- Small sections
- High extrusion resistance and long service life
- Low break-out and running friction
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- Large temperature range using the right O-ring

Please contact us for applications approaching maximum values.

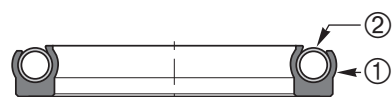
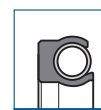
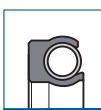
More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	r	O-ring NBR 70 Sh A	Reference
14	9,1	2,2	0,4	8,73 x 1,78	10E/GR 0140B-55/4470
16	11,1	2,2	0,4	10,82 x 1,78	10E/GR 0160B-55/4470
18	10,7	3,2	0,6	9,9 x 2,62	10E/GR 0180B-55/4470
20	15,1	2,2	0,4	14 x 1,78	10E/GR-L 0200B-55/4470
25	17,7	3,2	0,6	17,12 x 2,62	10E/GR 0250B-55/4470
30	19,3	4,2	1	18,66 x 3,53	10E/GR 0300B-55/4470
32	21,3	4,2	1	20,22 x 3,53	10E/GR 0320B-55/4470
35	24,3	4,2	1	23,4 x 3,53	10E/GR 0350B-55/4470
40	29,3	4,2	1	28,17 x 3,53	10E/GR 0400B-55/4470
40	32,7	3,2	0,6	31,42 x 2,62	10E/GR-L 0400B-55/4470
45	34,3	4,2	1	32,92 x 3,53	10E/GR 0450B-55/4470
50	39,3	4,2	1	37,7 x 3,53	10E/GR 0500B-55/4470
55	44,3	4,2	1	44,04 x 3,53	10E/GR 0550B-55/4470
60	44,9	6,3	1,3	43,82 x 5,34	10E/GR 0600B-55/4470
60	49,3	4,2	1	47,62 x 3,53	10E/GR-L 0600B-55/4470
63	47,9	6,3	1,3	46,99 x 5,34	10E/GR 0630B-55/4470
63	52,3	4,2	1	50,8 x 3,53	10E/GR-L 0630B-55/4470
65	49,9	6,3	1,3	4699 x 5,34	10E/GR 0650B-55/4470
70	54,9	6,3	1,3	53,34 x 5,34	10E/GR 0700B-55/4470
70	59,3	4,2		56,74 x 3,53	10E/GR-L 0700B-55/4470
75	59,9	6,3	1,3	56,52 x 5,34	10E/GR 0750B-55/4470
80	64,9	6,3	1,3	62,87 x 5,34	10E/GR 0800B-55/4470
85	69,9	6,3	1,3	69,22 x 5,34	10E/GR 0850B-55/4470
90	74,9	6,3	1,3	72,39 x 5,34	10E/GR 0900B-55/4470
95	79,9	6,3	1,3	78,74 x 5,34	10E/GR 0950B-55/4470
100	84,9	6,3	1,3	81,92 x 5,34	10E/GR 1000B-55/4470
105	89,9	6,3	1,3	88,27 x 5,34	10E/GR 1050B-55/4470
110	94,9	6,3	1,3	91,44 x 5,34	10E/GR 1100B-55/4470
115	99,9	6,3	1,3	97,79 x 5,34	10E/GR 1150B-55/4470
120	104,9	6,3	1,3	104,14 x 5,34	10E/GR 1200B-55/4470
125	109,9	6,3	1,3	107,32 x 5,34	10E/GR 1250B-55/4470
130	114,9	6,3	1,3	113,67 x 5,34	10E/GR 1300B-55/4470
140	119,5	8,1	1,8	116,84 x 7	10E/GR-P 1400B-55/4470
140	124,9	6,3	1,3	123,19 x 5,34	10E/GR 1400B-55/4470
150	129,5	8,1	1,8	126,37 x 7	10E/GR-P 1500B-55/4470
160	144,9	6,3	1,3	142,24 x 5,34	10E/GR 1600B-55/4470
160	139,5	8,1	1,8	135,89 x 7	10E/GR-P 1600B-55/4470
170	149,5	8,1	1,8	148,59 x 7	10E/GR-P 1700B-55/4470
180	164,9	6,3	1,3	164,47 x 5,34	10E/GR 1800B-55/4470
180	159,5	8,1	1,8	158,12 x 7	10E/GR-P 1800B-55/4470
200	179,5	8,1	1,8	177,17 x 7	10E/GR 2000B-55/4470
220	199,5	8,1	1,8	196,22 x 7	10E/GR 2200B-55/4470
250	229,5	8,1	1,8	227,97 x 7	10E/GR 2500B-55/4470



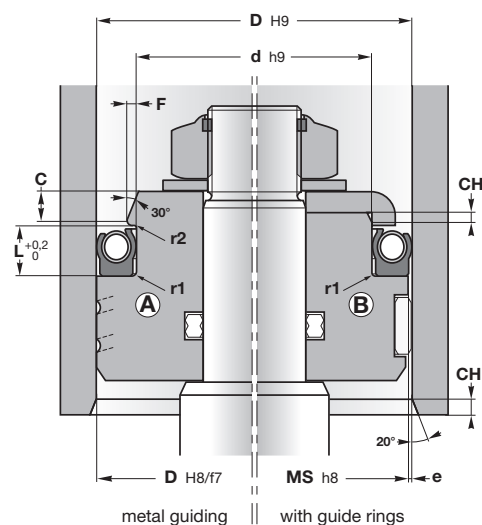
D (mm)			L (mm)	d (mm)	e (mm)			O-ring ②
10E/GR Standard serie	10E/GR-L Light serie	10E/GR-P Heavy serie			0-20 MPa	20-40 MPa	40-50 MPa	
8 → 16,9	17 → 26,9		2,2	D - 4,9	≤ 0,2	≤ 0,15	f8/H8	1,78
17 → 26,9	27 → 59,9		3,2	D - 7,3	≤ 0,25	≤ 0,15		2,62
27 → 59,9	60 → 199,9	17 → 24,9	4,2	D - 10,7	≤ 0,3	≤ 0,2		3,53
60 → 199,9	200 → 255,9	25 → 59,9	6,3	D - 15,1	≤ 0,4	≤ 0,25		5,33
200 → 255,9	256 → 669,9	60 → 199,9	8,1	D - 20,5	≤ 0,4	≤ 0,25		6,99
256 → 669,9	670 → 999,9	200 → 255,9	8,1	D - 24	≤ 0,4	≤ 0,25		6,99
670 → 999,9	≥ 1000	256 → 669,9	9,5	D - 27,3				8,4
≥ 1000		670 → 999,9	13,8	D - 38				12

**10VOP**

Example of item code

10 VOP3 - 0400 - PT02 - SS

Sealtech code Profile serie Diameter d (mm x 10) Material ① Material ②



✕ Machining of housings: see pages 48-49

10VOP is a single acting seal consisting of a U-shaped seal jacket and an helicoil corrosion resistant spring.

10VOP has an asymmetric seal profile. The heavy profile of its dynamic lip with an optimised front angle offers good leakage control, reduced friction and long service life. At low and zero pressure, the **metal spring** provides the primary sealing force.

As the system pressure increases, the main sealing force is achieved by the system pressure and ensures a tight seal from zero to high pressure. The possibility of **matching suitable materials for the seal and the spring** allows use in a wide range of applications beyond the field of hydraulics, e.g. in the chemical, pharmaceutical and foodstuffs industry.

Operating conditions

✕ see page 8

Pressure
PT02 ≤ 20 MPa
PT01 **on demand** ≤ 20 MPa
PT15 **on demand** ≤ 40 MPa
Temperature -70°C to 260°C
Speed ≤ 15 m/s
Fluids ✕ see pages 22-45

Materials

✕ see pages 10-19

Seal ① PT02
On demand: PT01, PT15
Spring ② AISI 316-1.4401 = SS
On demand: Elgiloy® (Cr-Co alloy)
Hastelloy® (Ni-Mo-Cr alloy)

Assembly

✕ see pages 54-59

On one-piece pistons ①
On two-piece pistons ②

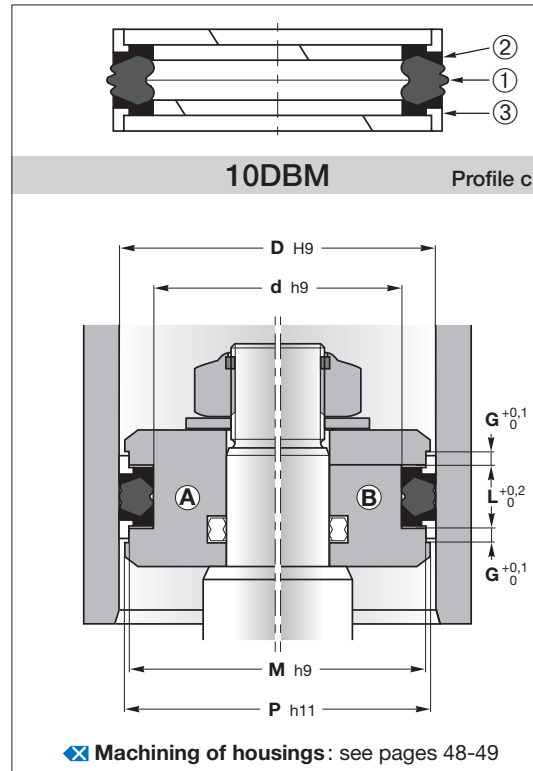
Advantage

Resistant to the most fluids
Low coefficient of friction
High abrasion resistance
No stick-slip: precision of operating control
Small section
Very high temperature range
PT01 and PT02 are FDA compliant

D	d	L	Reference
25	18,8	4,8	10VOP3-0250-PT02-SS
32	25,8	4,8	10VOP3-0320-PT02-SS
40	33,8	4,8	10VOP3-0400-PT02-SS
50	40,6	7,1	10VOP4-0500-PT02-SS
60	50,6	7,1	10VOP4-0600-PT02-SS
63	53,6	7,1	10VOP4-0630-PT02-SS
70	60,6	7,1	10VOP4-0700-PT02-SS
80	70,6	7,1	10VOP4-0800-PT02-SS
100	90,6	7,1	10VOP4-1000-PT02-SS
125	112,8	9,5	10VOP5-1250-PT02-SS
160	147,8	9,5	10VOP5-1600-PT02-SS
200	187,8	9,5	10VOP5-2000-PT02-SS

Please contact us for applications approaching maximum values.

Serie	d (mm)	L (mm)	F (mm)	r1 (mm)	r2 (mm)	A (mm)	B (mm)	C (mm)	e (mm)			
									2 MPa	10 MPa	20 MPa	40 MPa
VOP1	D - 2,9	2,4	0,4	0,25	0,15	0,3	1,2	0,7	≤ 0,2	≤ 0,1	≤ 0,08	≤ 0,05
VOP2	D - 4,5	3,6	0,6	0,4	0,15	0,4	1,5	1,1	≤ 0,25	≤ 0,15	≤ 0,1	≤ 0,07
VOP3	D - 6,2	4,8	0,7	0,4	0,2	0,4	2,5	1,3	≤ 0,35	≤ 0,2	≤ 0,15	≤ 0,08
VOP4	D - 9,4	7,1	0,8	0,4	0,25	0,6	4,5	1,4	≤ 0,5	≤ 0,25	≤ 0,2	≤ 0,1
VOP5	D - 12,2	9,5	0,9	0,5	0,25	0,6	6	1,6	≤ 0,6	≤ 0,3	≤ 0,25	≤ 0,12
VOP6	D - 19	13,5	1,5	0,5	0,4	0,9	11	2,6	≤ 0,9	≤ 0,5	≤ 0,4	≤ 0,2



10DBM piston seal is a double acting seal and guide element composed of a sealing rubber element, two anti-extrusion rings and two guide rings.

The NBR ring has a low compression set which assures good sealing performance. The rubber part is designed with three seal edges which concentrate the load against the cylinder tube. The three seal edges also form two cavities which keep small quantities of fluid that **increase the service life**. The design of the static side provides a wide contact area and prevents distortion inside the groove during installation.

The back-up rings prevent extrusion into the gap and **avoid the rotation** of the rubber part. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load.

Operating conditions ⚙️ see page 8

Pressure	≤ 35 MPa
Temperature	-30°C to 100°C
Speed	≤ 0,5 m/s
Fluids	⚙️ see pages 22-45

Materials ⚙️ see pages 10-19

Seal ①	N8T60
Anti-extrusion rings ②	PR01N
Guide rings ③	PO0WC

Assembly ⚙️ see pages 54-59

- On one-piece pistons (A)
- On two-piece pistons (B)

Advantages

- Efficient sealing at high and low pressure
- Easy installation on monobloc pistons
- Guiding and sealing are performed by the seal
- Good results with drawn tubes
- Simple groove design for one piece pistons

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Fluorelastomer compound ⚙️ page 562-563: **11DBS...FPM** and **11DBS...FPM/PT**
Inch dimensions ⚙️ page 564-565: **10DBS/I**

D	d	L	G	M	P	Reference TSS	Reference
40	24 30	18,4 16,4	6,35 6,35	35,4 35,4	38,5 38,5	PCB0A0400-N8RO PCB3A0400-N8RO	10DBM 157094 10DBM 157118
50	34	18,4	6,35	45,41	48,66	PCB1A0500-N8RO	10DBM 196133
60	44	18,4	6,35	55,39	58,65	PCB1A0600-N8RO	10DBM 236173
63	47	18,4	6,35	58,39	61,63	PCB1A0630-N8RO	10DBM 248185
70	50	22,4	6,35	64,18	68,34	PCB0A0700-N8RO	10DBM 275196
80	60	22,4	6,35	74,16	78,34	PCB0A0800-N8RO	10DBM 314236
90	70	22,4	6,35	84,15	88,31	PCB0A0900-N8RO	10DBM 354275
100	75	22,4	6,35	93,14	98,05	PCB0A1000-N8RO	10DBM 393295
110	85	22,4	6,35	103,1	108	PCB0A1100-N8RO	10DBM 433334
115	90	22,4	6,35	108,1	113,02	PCB0A1150-N8RO	10DBM 452354
120	95	22,4	6,35	113,1	118,02	PCB0A1200-N8RO	10DBM 472374
125	100	25,4	6,35	118,08	122,96	PCB0A1250-N8RO	10DBM 492393
130	105	25,4	9,52	122,6	127,5	PCB1A1300-N8RO	10DBM 511413
140	115	25,4	9,52	132,6	137,5	PCB1A1400-N8RO	10DBM 551452
150	125	25,4	9,52	142,6	147,5	PCB1A1500-N8RO	10DBM 590492
160	135 135	25,4 25,4	9,52 6,35	152,6 152,6	157,5 157,5	PCB1A1600-N8RO PCB4A1600-N8RO	10DBM 629531 10DBM 629531/1
180	155	25,4	12,7	171,72	177,1	PCB1A1800-N8RO	10DBM 708610
200	175 175	25,4 31,5	12,7 6,6	191,62 196	197 199	PCB0A2000-N8RO PCB102000-N8RO	10DBM 787688 10DBM 787688/M
220	195	25,4	12,7	211,62	217	PCB1A2200-N8RO	10DBM 866767

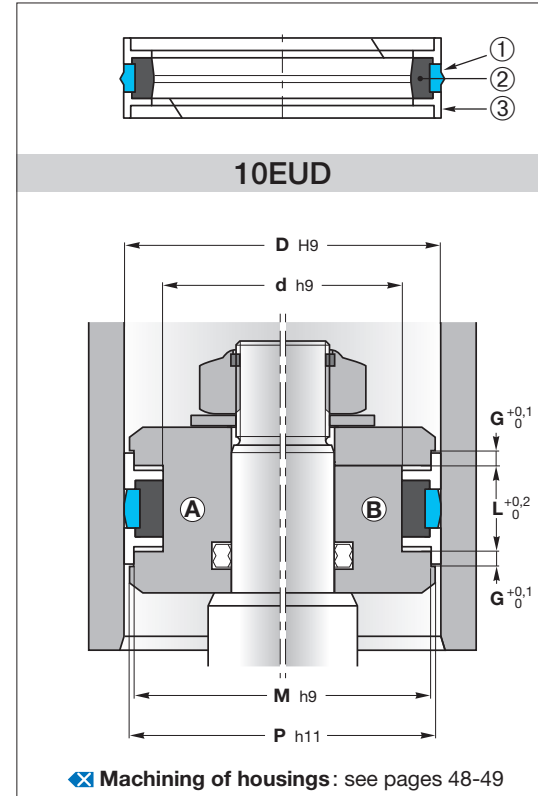
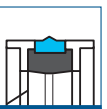


10EUD

Polypac® Euroseal



SEALTECH
Hydraulic Seals Technology



This type of seals are double acting piston seals with **integrated guide rings**. They are characterised by the combination of an elastomer energiser and a polyurethane ring that produces a very effective sealing action and extends the service life. The function of the guide rings is to guide the piston in the cylinder tube and to support radial load.

10EUD is designed with T-shaped back-up and guide rings.

Operating conditions see page 8

Pressure ≤ 40 MPa
Temperature -30°C to 100°C
Speed $\leq 0,5$ m/s
Fluids see pages 22-45

Materials see pages 10-19

Dynamic sealing element ① Z20
Energising element ② NBR
Guide rings ③ Acetal resin

Assembly see pages 54-59

On one-piece pistons (A)
On two-piece pistons (B)

Advantages

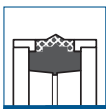
Efficient sealing at high and low pressure
Excellent abrasion resistance
Extended service life
Easy installation on monobloc pistons
Small sections

Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

D	d	L	G	M	P	Reference TSS	Reference
50	38	20,5	4,2	46	49,4	PCG000500-Z2053	10EUD 5038
60	48	20,5	4,2	56	59,4	PCG000600-Z2053	10EUD 6048
63	51	20,5	4,2	59	62,4	PCG000630-Z2053	10EUD 6351
70	58	20,5	4,2	66	69,4	PCG000700-Z2053	10EUD 7058
80	66	22,5	5,2	76	79,4	PCG000800-Z2053	10EUD 8066
100	86	22,5	5,2	96	99,4	PCG001000-Z2053	10EUD 10086
110	96	22,5	5,2	106	109,4	PCG001100-Z2053	10EUD 11096
120	106	22,5	5,2	116	119,4	PCG001200-Z2053	10EUD 120106
125	108	26,5	7,2	121	124,4	PCG001250-Z2053	10EUD 125108

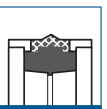


10DPC

Polypac® Duopac



SEALTECH
Hydraulic Seals Technology



10DPC is a double acting seal and guide element composed of a sealing rubber reinforced element and two guide rings.

The dynamic side of the rubber part is fabric reinforced. Fabric reinforced nitrile elastomer has a higher mechanical strength and **better lubricating properties**.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 120°C
Speed	≤ 0,5 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Seal ①	N8T60-C/N8T60
Guide rings ②	PO0WC

Assembly

✕ see pages 54-59

On two-piece pistons

Advantages

- Efficient sealing at high and low pressures
- Low friction
- High pressure
- For heavy duty application

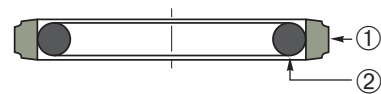
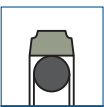
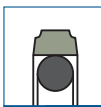
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

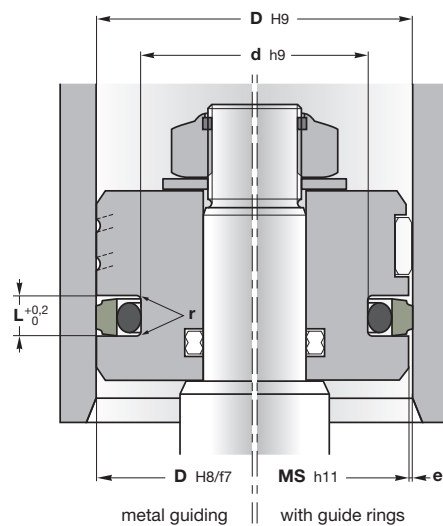
D	d	L	G	M	P	Reference TSS	Reference
30	17	15,4	6,35	26,5	29	PCF000300-N000C	10DPC 3017
40	24	18,4	6,35	35,4	38,7	PCF000400-N000C	10DPC 4024
45	29	18,4	6,35	40,4	43,7	PCF000450-N000C	10DPC 4529
50	34	18,4	6,35	45,4	48,7	PCF000500-N000C	10DPC 5034
60	44	18,4	6,35	55,4	58,7	PCF000600-N000C	10DPC 6044
65	50	18,4	6,35	60,4	63,7	PCF000650-N000C	10DPC 6550
70	50	22,4	6,35	64,2	68,3	PCF000700-N000C	10DPC 7050
75	55	22,4	6,35	69,2	73,3	PCF000750-N000C	10DPC 7555
80	60	22,4	6,35	74,2	78,3	PCF000800-N000C	10DPC 8060
85	65	22,4	6,35	79,2	83,3	PCF000850-N000C	10DPC 8565
90	70	22,4	6,35	84,15	88,3	PCF000900-N000C	10DPC 9070
95	75	22,4	6,35	89,15	93,3	PCF000950-N000C	10DPC 9575
100	75	22,4	6,35	93,15	98,05	PCF001000-N000C	10DPC 10075
100	80	25,4	6,35	94,15	98,3	PCF101000-N000C	10DPC 10080
105	85	22,4	6,35	98,1	103	PCF001050-N000C	10DPC 10585
110	85	22,4	6,35	103,1	108	PCF001100-N000C	10DPC 11085
120	100	25,4	6,35	114,1	118,3	PCF001200-N000C	10DPC 120100
130	105	25,4	6,35	123,1	128	PCF001300-N000C	10DPC 130105
140	115	25,4	6,35	133	138	PCF001400-N000C	10DPC 140115
150	125	25,4	6,35	143	148	PCF001500-N000C	10DPC 150125

✕ Machining of housings: see pages 48-49

**17PT...-T/M...N**

Example of item code

17	PT03	0	0800	-	T46	N
Sealtech code	Profile serie	Type (standard)	Diameter D (mm x 10)		Material ①	Material ②

✕ **Machining of housings:** see pages 48-49

17PT Turcon® Glyd Ring® T is a double acting piston seal. Both lateral profile flanks are inclined so that the seal profile tapers towards the seal surface.

The profile can thus retain the robust and compact form typical of piston seals without losing any of the flexibility required to achieve a pressure-related maximum compression. The edge angle created by the special **Glyd Ring® T** crosssectional form permits an additional degree of freedom and enables a slight tilting movement of the seal.

The maximum compression is thus always shifted towards the area of the seal edge directly exposed to the pressure. On the low pressure edge of the seal, the **Glyd Ring® T** exhibits only zones with neutral strains, thus effectively reducing the danger of gap extrusion.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①	Turcon® T46 NEW: Turcon® M12
Energising element ②	NBR 70 Sh A

Assembly

✕ see pages 54-59

On one-piece pistons

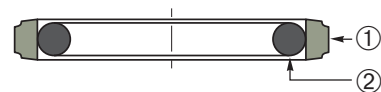
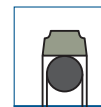
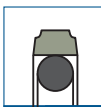
Advantages

- Low running friction
- No Stick-slip
- Long service life
- Small sections
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- Simple groove design
- Large temperature range using the right O-ring

Please contact us for applications approaching maximum values.

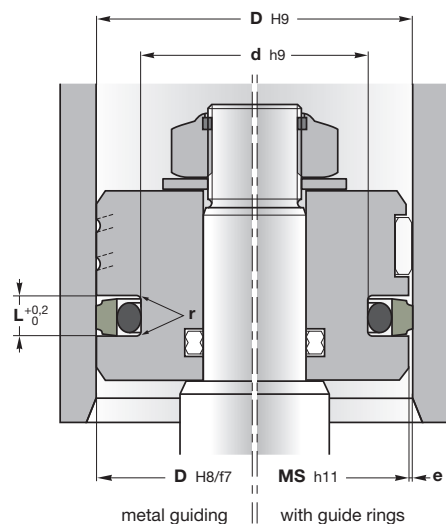
Serie	D (mm)			L (mm)	d (mm)	r (mm)	e (mm)				O-ring ①
	Standard serie	Light serie	Heavy serie				10 MPa	20 MPa	40MPa	50MPa	
PT00	8 → 14,9	15 → 39,9		2,2	D - 4,9	0,4	≤ 0,4	≤ 0,3	≤ 0,2		1,78
PT01	15 → 39,9	40 → 79,9		3,2	D - 7,5	0,6	≤ 0,6	≤ 0,5	≤ 0,3		2,62
PT02	40 → 79,9	80 → 132,9	15 → 39,9	4,2	D - 11	1	≤ 0,7	≤ 0,5	≤ 0,3		3,53
PT03	80 → 132,9	133 → 329,9	40 → 79,9	6,3	D - 15,5	1,3	≤ 0,8	≤ 0,6	≤ 0,4	H8/f8	5,34
PT04	133 → 329,9	330 → 669,9	80 → 132,9	8,1	D - 21	1,8	≤ 0,8	≤ 0,6	≤ 0,4		7
PT08	330 → 669,9	670 → 999,9	133 → 329,9	8,1	D - 24,5	1,8	≤ 0,9	≤ 0,7	≤ 0,5		7
PT05	670 → 999,9		330 → 669,9	9,5	D - 28	2,5	≤ 1	≤ 0,8	≤ 0,6		8,4
PT05X	≥ 1000			13,8	D - 28	3	≤ 1,2	≤ 0,9	≤ 0,7		12

D	d	L	O-ring NBR 70 Sh A	ISO 3320	Reference	D	d	L	O-ring NBR 70 Sh A	ISO 3320	Reference
10	5,1	2,2	4,47 x 1,78	•	17PT0000100-T46N	85	69,5	6,3	69,22 x 5,33		17PT0300850-T46N
12	7,1	2,2	6,7 x 1,8	•	17PT0000120-T46N	85	64	8,1	63 x 7		17PT0400850-T46N
14	9,1	2,2	8,75 x 1,8		17PT0000140-T46N	90	74,5	6,3	72,39 x 5,33		17PT0300900-T46N
15	7,5	3,2	6,98 x 2,62		17PT0100150-T46N	90	69	8,1	68 x 7		17PT0400900-T46N
16	11,1	2,2	10,6 x 1,8	•	17PT0000160-T46N	95	79,5	6,3	78,74 x 5,33		17PT0300950-T46N
16	8,5	3,2	7,59 x 2,62	•	17PT0100160-T46N	100	89	4,2	88,49 x 3,53	•	17PT0201000-T29N
18	10,5	3,2	9,19 x 2,62		17PT0100180-T46N	100	89	4,2	88,49 x 3,53	•	17PT0201000-T46N
20	12,5	3,2	12,37 x 2,62	•	17PT0100200-T46N	100	84,5	6,3	81,92 x 5,33	•	17PT0301000-M12N
22	14,5	3,2	13,94 x 2,62		17PT0100220-T46N	100	84,5	6,3	81,92 x 5,33	•	17PT0301000-T46N
24	16,5	3,2	15,54 x 2,62		17PT0100240-T46N	100	79	8,1	78 x 7	•	17PT0401000-T46N
25	20,1	2,2	19 x 1,8	•	17PT0000250-T46N	105	89,5	6,3	88,27 x 5,33		17PT0301050-T46N
25	17,5	3,2	17,12 x 2,62	•	17PT0100250-T46N	110	99	4,2	98,02 x 3,53		17PT0201100-T46N
25	14	4,2	13,87 x 3,53	•	17PT0200250-T46N	110	94,5	6,3	91,44 x 5,33		17PT0301100-T46N
28	20,5	3,2	20,29 x 2,62		17PT0100280-T46N	110	89	8,1	88 x 7		17PT0401100-T46N
30	22,5	3,2	21,89 x 2,62		17PT0100300-T46N	115	99,5	6,3	97,79 x 5,33		17PT0301150-T46N
32	24,5	3,2	23,47 x 2,62	•	17PT0100320-T46N	120	104,5	6,3	100,97 x 5,33		17PT0301200-T46N
32	21	4,2	20,22 x 3,53	•	17PT0200320-T46N	120	99	8,1	98 x 7		17PT0401200-T46N
35	27,5	3,2	26,64 x 2,62		17PT0100350-T46N	125	109,5	6,3	107,32 x 5,33	•	17PT0301250-M12N
36	28,5	3,2	28,24 x 2,62		17PT0100360-T46N	125	109,5	6,3	107,32 x 5,33	•	17PT0301250-T46N
38	30,5	3,2	29,82 x 2,62		17PT0100380-T46N	125	104	8,1	103 x 7	•	17PT0401250-T46N
40	32,5	3,2	31,42 x 2,62	•	17PT0100400-T46N	130	114,5	6,3	113,67 x 5,33		17PT0301300-T46N
40	29	4,2	28,17 x 3,53	•	17PT0200400-T46N	130	109	8,1	108 x 7		17PT0401300-T46N
42	31	4,2	29,75 x 3,53		17PT0200420-T46N	135	124	4,2	123,42 x 3,53		17PT0201350-T29N
42,9	31,9	4,2	31,34 x 3,53		17PT0200429-T46N	135	119,5	6,3	117,48 x 5,33		17PT0301350-M12N
45	34	4,2	32,92 x 3,53		17PT0200450-T46N	135	114	8,1	113,67 x 7		17PT0401350-T46N
48	37	4,2	36,09 x 3,53		17PT0200480-T46N	140	124,5	6,3	123,19 x 5,33		17PT0301400-T46N
50	39	4,2	37,69 x 3,53	•	17PT0200500-T46N	140	119	8,1	116,84 x 7		17PT0401400-M12N
50	34,5	6,3	32,69 x 5,33	•	17PT0300500-T46N	140	119	8,1	116,84 x 7		17PT0401400-T46N
52	41	4,2	40,87 x 3,53		17PT0200520-T46N	150	129	8,1	126,37 x 7		17PT0401500-T46N
55	44	4,2	44,04 x 3,53		17PT0200550-T40N	160	139	8,1	135,89 x 7	•	17PT0401600-T46N
55	44	4,2	44,04 x 3,53		17PT0200550-T46N	170	149	8,1	145,42 x 7		17PT0401700-T46N
60	49	4,2	47,22 x 3,53		17PT0200600-T46N	175	154	8,1	151,77 x 7		17PT0401750-T46N
60	44,5	6,3	43,82 x 5,33		17PT0300600-T46N	180	164,5	6,3	164,47 x 5,33		17PT0301800-T46N
63	52	4,2	50,39 x 3,53	•	17PT0200630-T46N	180	159	8,1	158,12 x 7		17PT0401800-T46N
63	47,5	6,3	46,99 x 5,33	•	17PT0300630-T46N	190	174,5	6,3	174 x 5,33		17PT0301900-T29N
65	54	4,2	53,57 x 3,53		17PT0200650-T46N	190	169	8,1	164,47 x 7		17PT0401900-T46N
65	49,5	6,3	46,99 x 5,33		17PT0300650-T46N	200	179	8,1	177,17 x 7	•	17PT0402000-M12N
70	59	4,2	56,74 x 3,53		17PT0200700-T46N	200	179	8,1	177,17 x 7	•	17PT0402000-T46N
70	54,5	6,3	53,34 x 5,33		17PT0300700-T46N	210	189	8,1	183,52 x 7		17PT0402100-T46N
75	64	4,2	63,09 x 3,53		17PT0200750-T46N	220	199	8,1	196,22 x 7		17PT0402200-T46N
80	69	4,2	66,27 x 3,53	•	17PT0200800-T46N	225	204	8,1	202,57 x 7		17PT0402250-T46N
80	64,5	6,3	62,87 x 5,33	•	17PT0300800-M12N	230	209	8,1	208,92 x 7		17PT0402300-T46N
80	64,5	6,3	62,87 x 5,33	•	17PT0300800-T46N	240	219	8,1	215,27 x 7		17PT0402400-T46N
80	59	8,1	58 x 7	•	17PT0400800-T46N	250	229	8,1	227,97 x 7	•	17PT0402500-T46N
85	74	4,2	73,02 x 3,53		17PT0200850-T46N	260	239	8,1	240,67 x 7		17PT0402600-T46N

**17PT...-T/M...N**

Example of item code

17	PT03	0	0800	-	T46	N
Sealtech code	Profile series	Type (standard)	Diameter D (mm x 10)		Material ①	Material ②



$$MS = D - 2e$$

✕ **Machining of housings:** see pages 48-49

17PT Turcon® Glyd Ring® T is a double acting piston seal. Both lateral profile flanks are inclined so that the seal profile tapers towards the seal surface.

The profile can thus retain the robust and compact form typical of piston seals without losing any of the flexibility required to achieve a pressure-related maximum compression. The edge angle created by the special **Glyd Ring® T** crosssectional form permits an additional degree of freedom and enables a slight tilting movement of the seal.

The maximum compression is thus always shifted towards the area of the seal edge directly exposed to the pressure. On the low pressure edge of the seal, the **Glyd Ring® T** exhibits only zones with neutral strains, thus effectively reducing the danger of gap extrusion.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①	Turcon® T46
	NEW: Turcon® M12
Energising element ②	NBR 70 Sh A

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

- Low running friction
- No Stick-slip
- Long service life
- Small sections
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- Simple groove design
- Large temperature range using the right O-ring

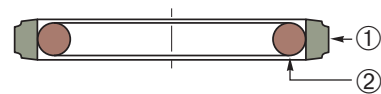
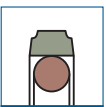
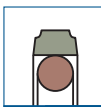
Please contact us for applications approaching maximum values.

D	d	L	O-ring NBR 70 Sh A	ISO 3320	Reference
260	232	9,5	229,1 x 8,4		17PT0502600-T46N
270	249	8,1	240,67 x 7		17PT0402700-T46N
280	259	8,1	253,37 x 7		17PT0402800-M12N
280	259	8,1	253,37 x 7		17PT0402800-T46N
280	252	9,5	249,1 x 8,4		17PT0502800-T46N
290	269	8,1	266,07 x 7		17PT0402900-T46N
300	279	8,1	278,77 x 7		17PT0403000-M12N
300	279	8,1	278,77 x 7		17PT0403000-T46N
320	299	8,1	291,47 x 7	•	17PT0403200-T46N
320	295,5	8,1	291,47 x 7	•	17PT0803200-T46N
330	305,5	8,1	304,17 x 7		17PT0803300-T46N
340	319	8,1	316,87 x 7		17PT0403400-T46N
340	315,5	8,1	310,5 x 7		17PT0803400-T46N
350	325,5	8,1	316,87 x 7		17PT0803500-T46N
360	335,5	8,1	329,57 x 7		17PT0803600-M12N
360	335,5	8,1	329,57 x 7		17PT0803600-T46N
370	345,5	8,1	342,27 x 7		17PT0803700-T46N
380	355,5	8,1	354,97 x 7		17PT0803800-T46N
390	365,5	8,1	354,97 x 7		17PT0803900-T46N
400	375,5	8,1	367,67 x 7	•	17PT0804000-T46N
410	385,5	8,1	380,37 x 7		17PT0804100-T46N
420	395,5	8,1	393,07 x 7		17PT0804200-T46N
450	425,5	8,1	417,96 x 7		17PT0804500-T46N
450	422	9,5	419,5 x 8,4		17PT0504500-T46N
480	455,5	8,1	443,36 x 7		17PT0804800-T46N
500	475,5	8,1	468,76 x 7	•	17PT0805000-T46N

More information

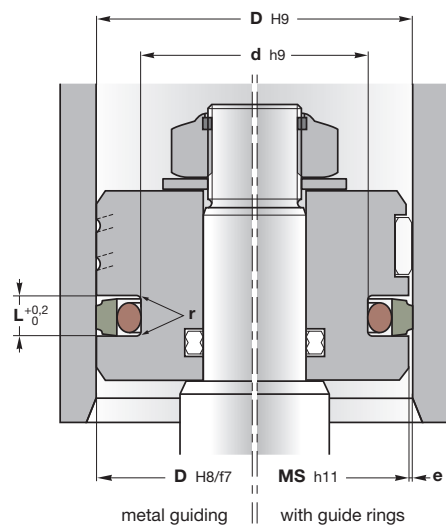
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Serie	D (mm)			L (mm)	d (mm)	r (mm)	e (mm)				O-ring ①
	Standard serie	Light serie	Heavy serie				10 MPa	20 MPa	40MPa	50MPa	
PT00	8 → 14,9	15 → 39,9		2,2	D - 4,9	0,4	≤ 0,4	≤ 0,3	≤ 0,2		1,78
PT01	15 → 39,9	40 → 79,9		3,2	D - 7,5	0,6	≤ 0,6	≤ 0,5	≤ 0,3		2,62
PT02	40 → 79,9	80 → 132,9	15 → 39,9	4,2	D - 11	1	≤ 0,7	≤ 0,5	≤ 0,3		3,53
PT03	80 → 132,9	133 → 329,9	40 → 79,9	6,3	D - 15,5	1,3	≤ 0,8	≤ 0,6	≤ 0,4	H8/f8	5,34
PT04	133 → 329,9	330 → 669,9	80 → 132,9	8,1	D - 21	1,8	≤ 0,8	≤ 0,6	≤ 0,4		7
PT08	330 → 669,9	670 → 999,9	133 → 329,9	8,1	D - 24,5	1,8	≤ 0,9	≤ 0,7	≤ 0,5		7
PT05	670 → 999,9		330 → 669,9	9,5	D - 28	2,5	≤ 1	≤ 0,8	≤ 0,6		8,4
PT05X	≥ 1000			13,8	D - 28	3	≤ 1,2	≤ 0,9	≤ 0,7		12

**17PT...-T/M...V**

Example of item code

17	PT03	0	0800	-	T46	V
Sealtech code	Profile serie	Type (standard)	Diameter D (mm x 10)		Material ①	Material ②



✕ Machining of housings: see pages 48-49

17PT Turcon® Glyd Ring® T is a double acting piston seal. Both lateral profile flanks are inclined so that the seal profile tapers towards the seal surface.

The profile can thus retain the robust and compact form typical of piston seals without losing any of the flexibility required to achieve a pressure-related maximum compression. The edge angle created by the special **Glyd Ring® T** crosssectional form permits an additional degree of freedom and enables a slight tilting movement of the seal.

The maximum compression is thus always shifted towards the area of the seal edge directly exposed to the pressure. On the low pressure edge of the seal, the **Glyd Ring® T** exhibits only zones with neutral strains, thus effectively reducing the danger of gap extrusion.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-20°C to 200°C
Speed	≤ 15 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①	Turcon® T46 NEW: Turcon® M12
Energising element ②	FPM 75 Sh A

Assembly

✕ see pages 54-59

On one-piece pistons

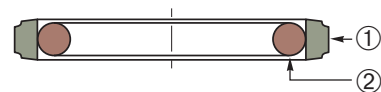
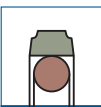
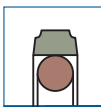
Advantages

- Low running friction
- No Stick-slip
- Long service life
- Small sections
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- Simple groove design
- Large temperature range using the right O-ring

Please contact us for applications approaching maximum values.

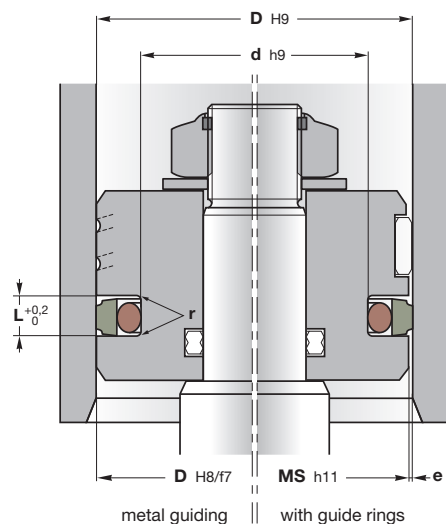
Serie	D (mm)			L (mm)	d (mm)	r (mm)	e (mm)				O-ring ①
	Standard serie	Light serie	Heavy serie				10 MPa	20 MPa	40MPa	50MPa	
PT00	8 → 14,9	15 → 39,9		2,2	D - 4,9	0,4	≤ 0,4	≤ 0,3	≤ 0,2		1,78
PT01	15 → 39,9	40 → 79,9		3,2	D - 7,5	0,6	≤ 0,6	≤ 0,5	≤ 0,3		2,62
PT02	40 → 79,9	80 → 132,9	15 → 39,9	4,2	D - 11	1	≤ 0,7	≤ 0,5	≤ 0,3		3,53
PT03	80 → 132,9	133 → 329,9	40 → 79,9	6,3	D - 15,5	1,3	≤ 0,8	≤ 0,6	≤ 0,4		5,34
PT04	133 → 329,9	330 → 669,9	80 → 132,9	8,1	D - 21	1,8	≤ 0,8	≤ 0,6	≤ 0,4		7
PT08	330 → 669,9	670 → 999,9	133 → 329,9	8,1	D - 24,5	1,8	≤ 0,9	≤ 0,7	≤ 0,5		7
PT05	670 → 999,9		330 → 669,9	9,5	D - 28	2,5	≤ 1	≤ 0,8	≤ 0,6		8,4
PT05X		≥ 1000		13,8	D - 28	3	≤ 1,2	≤ 0,9	≤ 0,7		12

D	d	L	O-ring FPM 75 Sh A	ISO 3320	Reference	D	d	L	O-ring FPM 75 Sh A	ISO 3320	Reference
10	5,1	2,2	4,47 x 1,78	•	17PT0000100-T46V	85	69,5	6,3	69,22 x 5,33		17PT0300850-T46V
12	7,1	2,2	6,7 x 1,8	•	17PT0000120-T46V	85	64	8,1	63 x 7		17PT0400850-T46V
14	9,1	2,2	8,75 x 1,8		17PT0000140-T46V	90	74,5	6,3	72,39 x 5,33		17PT0300900-T46V
15	7,5	3,2	6,98 x 2,62		17PT0100150-T46V	90	69	8,1	68 x 7		17PT0400900-T46V
16	11,1	2,2	10,6 x 1,8	•	17PT0000160-T46V	95	79,5	6,3	78,74 x 5,33		17PT0300950-T46V
16	8,5	3,2	7,59 x 2,62	•	17PT0100160-T46V	100	89	4,2	88,49 x 3,53	•	17PT0201000-T29V
18	10,5	3,2	9,19 x 2,62		17PT0100180-T46V	100	89	4,2	88,49 x 3,53	•	17PT0201000-T46V
20	12,5	3,2	12,37 x 2,62	•	17PT0100200-T46V	100	84,5	6,3	81,92 x 5,33	•	17PT0301000-M12V
22	14,5	3,2	13,94 x 2,62		17PT0100220-T46V	100	84,5	6,3	81,92 x 5,33	•	17PT0301000-T46V
24	16,5	3,2	15,54 x 2,62		17PT0100240-T46V	100	79	8,1	78 x 7	•	17PT0401000-T46V
25	20,1	2,2	19 x 1,8	•	17PT0000250-T46V	105	89,5	6,3	88,27 x 5,33		17PT0301050-T46V
25	17,5	3,2	17,12 x 2,62	•	17PT0100250-T46V	110	99	4,2	98,02 x 3,53		17PT0201100-T46V
25	14	4,2	13,87 x 3,53	•	17PT0200250-T46V	110	94,5	6,3	91,44 x 5,33		17PT0301100-T46V
28	20,5	3,2	20,29 x 2,62		17PT0100280-T46V	110	89	8,1	88 x 7		17PT0401100-T46V
30	22,5	3,2	21,89 x 2,62		17PT0100300-T46V	115	99,5	6,3	97,79 x 5,33		17PT0301150-T46V
32	24,5	3,2	23,47 x 2,62	•	17PT0100320-T46V	120	104,5	6,3	100,97 x 5,33		17PT0301200-T46V
32	21	4,2	20,22 x 3,53	•	17PT0200320-T46V	120	99	8,1	98 x 7		17PT0401200-T46V
35	27,5	3,2	26,64 x 2,62		17PT0100350-T46V	125	109,5	6,3	107,32 x 5,33	•	17PT0301250-M12V
36	28,5	3,2	28,24 x 2,62		17PT0100360-T46V	125	109,5	6,3	107,32 x 5,33	•	17PT0301250-T46V
38	30,5	3,2	29,82 x 2,62		17PT0100380-T46V	125	104	8,1	103 x 7	•	17PT0401250-T46V
40	32,5	3,2	31,42 x 2,62	•	17PT0100400-T46V	130	114,5	6,3	113,67 x 5,33		17PT0301300-T46V
40	29	4,2	28,17 x 3,53	•	17PT0200400-T46V	130	109	8,1	108 x 7		17PT0401300-T46V
42	31	4,2	29,75 x 3,53		17PT0200420-T46V	135	124	4,2	123,42 x 3,53		17PT0201350-T29V
42,9	31,9	4,2	31,34 x 3,53		17PT0200429-T46V	135	119,5	6,3	117,48 x 5,33		17PT0301350-M12V
45	34	4,2	32,92 x 3,53		17PT0200450-T46V	135	114	8,1	113,67 x 7		17PT0401350-T46V
48	37	4,2	36,09 x 3,53		17PT0200480-T46V	140	124,5	6,3	123,19 x 5,33		17PT0301400-T46V
50	39	4,2	37,69 x 3,53	•	17PT0200500-T46V	140	119	8,1	116,84 x 7		17PT0401400-M12V
50	34,5	6,3	32,69 x 5,33	•	17PT0300500-T46V	140	119	8,1	116,84 x 7		17PT0401400-T46V
52	41	4,2	40,87 x 3,53		17PT0200520-T46V	150	129	8,1	126,37 x 7		17PT0401500-T46V
55	44	4,2	44,04 x 3,53		17PT0200550-T40V	160	139	8,1	135,89 x 7	•	17PT0401600-T46V
55	44	4,2	44,04 x 3,53		17PT0200550-T46V	170	149	8,1	145,42 x 7		17PT0401700-T46V
60	49	4,2	47,22 x 3,53		17PT0200600-T46V	175	154	8,1	151,77 x 7		17PT0401750-T46V
60	44,5	6,3	43,82 x 5,33		17PT0300600-T46V	180	164,5	6,3	164,47 x 5,33		17PT0301800-T46V
63	52	4,2	50,39 x 3,53	•	17PT0200630-T46V	180	159	8,1	158,12 x 7		17PT0401800-T46V
63	47,5	6,3	46,99 x 5,33	•	17PT0300630-T46V	190	174,5	6,3	174 x 5,33		17PT0301900-T29V
65	54	4,2	53,57 x 3,53		17PT0200650-T46V	190	169	8,1	164,47 x 7		17PT0401900-T46V
65	49,5	6,3	46,99 x 5,33		17PT0300650-T46V	200	179	8,1	177,17 x 7	•	17PT0402000-M12V
70	59	4,2	56,74 x 3,53		17PT0200700-T46V	200	179	8,1	177,17 x 7	•	17PT0402000-T46V
70	54,5	6,3	53,34 x 5,33		17PT0300700-T46V	210	189	8,1	183,52 x 7		17PT0402100-T46V
75	64	4,2	63,09 x 3,53		17PT0200750-T46V	220	199	8,1	196,22 x 7		17PT0402200-T46V
80	69	4,2	66,27 x 3,53	•	17PT0200800-T46V	225	204	8,1	202,57 x 7		17PT0402250-T46V
80	64,5	6,3	62,87 x 5,33	•	17PT0300800-M12V	230	209	8,1	208,92 x 7		17PT0402300-T46V
80	64,5	6,3	62,87 x 5,33	•	17PT0300800-T46V	240	219	8,1	215,27 x 7		17PT0402400-T46V
80	59	8,1	58 x 7	•	17PT0400800-T46V	250	229	8,1	227,97 x 7	•	17PT0402500-T46V
85	74	4,2	73,02 x 3,53		17PT0200850-T46V	260	239	8,1	240,67 x 7		17PT0402600-T46V

**17PT...-T/M...V**

Example of item code

17	PT03	0	0800	-	T46	V
Sealtech code	Profile series	Type (standard)	Diameter D (mm x 10)		Material ①	Material ②



$$MS = D - 2e$$

✕ **Machining of housings:** see pages 48-49

17PT Turcon® Glyd Ring® T is a double acting piston seal. Both lateral profile flanks are inclined so that the seal profile tapers towards the seal surface.

The profile can thus retain the robust and compact form typical of piston seals without losing any of the flexibility required to achieve a pressure-related maximum compression. The edge angle created by the special **Glyd Ring® T** crosssectional form permits an additional degree of freedom and enables a slight tilting movement of the seal.

The maximum compression is thus always shifted towards the area of the seal edge directly exposed to the pressure. On the low pressure edge of the seal, the **Glyd Ring® T** exhibits only zones with neutral strains, thus effectively reducing the danger of gap extrusion.

Operating conditions

✕ see page 8

Pressure	≤ 50 MPa
Temperature	-20°C to 200°C
Speed	≤ 15 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①	Turcon® T46 NEW: Turcon® M12
Energising element ②	FPM 75 Sh A

Assembly

✕ see pages 54-59

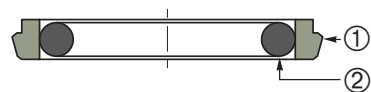
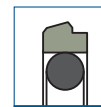
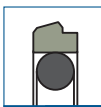
On one-piece pistons

Advantages

- Low running friction
- No Stick-slip
- Long service life
- Small sections
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- Simple groove design
- Large temperature range using the right O-ring

Please contact us for applications approaching maximum values.

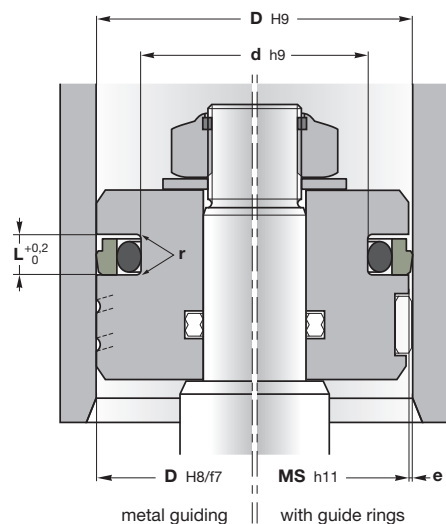
D	d	L	O-ring FPM 75 Sh A	ISO 3320	Reference
260	232	9,5	229,1 x 8,4		17PT0502600-T46V
270	249	8,1	240,67 x 7		17PT0402700-T46V
280	259	8,1	253,37 x 7		17PT0402800-M12V
280	259	8,1	253,37 x 7		17PT0402800-T46V
280	252	9,5	249,1 x 8,4		17PT0502800-T46V
290	269	8,1	266,07 x 7		17PT0402900-T46V
300	279	8,1	278,77 x 7		17PT0403000-M12V
300	279	8,1	278,77 x 7		17PT0403000-T46V
320	299	8,1	291,47 x 7	•	17PT0403200-T46V
320	295,5	8,1	291,47 x 7	•	17PT0803200-T46V
330	305,5	8,1	304,17 x 7		17PT0803300-T46V
340	319	8,1	316,87 x 7		17PT0403400-T46V
340	315,5	8,1	310,5 x 7		17PT0803400-T46V
350	325,5	8,1	316,87 x 7		17PT0803500-T46V
360	335,5	8,1	329,57 x 7		17PT0803600-M12V
360	335,5	8,1	329,57 x 7		17PT0803600-T46V
370	345,5	8,1	342,27 x 7		17PT0803700-T46V
380	355,5	8,1	354,97 x 7		17PT0803800-T46V
390	365,5	8,1	354,97 x 7		17PT0803900-T46V
400	375,5	8,1	367,67 x 7	•	17PT0804000-T46V
410	385,5	8,1	380,37 x 7		17PT0804100-T46V
420	395,5	8,1	393,07 x 7		17PT0804200-T46V
450	425,5	8,1	417,96 x 7		17PT0804500-T46V
450	422	9,5	419,5 x 8,4		17PT0504500-T46V
480	455,5	8,1	443,36 x 7		17PT0804800-T46V
500	475,5	8,1	468,76 x 7	•	17PT0805000-T46V



17PSK...-T/M...N

Example of item code

17	PSK3	0	0800	-	T46	N
Sealtech code	Profile series	Type (standard)	Diameter D (mm x 10)		Material ①	Material ②



$$MS = D - 2e$$

✕ Machining of housings: see pages 48-49

17PSK Stepseal® 2K is a single acting seal element consisting of a seal ring of high-grade Turcon® material and an O-ring as energising element.

Stepseal® 2K was originally developed and patented by Trelleborg Sealing Solutions as a rod seal.

Due to its outstanding properties, however, it is equally well suited as a single acting piston seal where high demands are made on positional accuracy and free movement.

Operating conditions ✕ see page 8

Pressure	Turcon® T46: ≤ 50 MPa Turcon® T29: ≤ 30 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Dynamic sealing element ①	Turcon® T46 Turcon® T29 NEW: Turcon® M12
Energising element ②	NBR 70 Sh A

Assembly ✕ see pages 54-59

On one-piece pistons

Advantages

- Low running friction
- No Stick-slip
- Long life
- Small sections
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- Simple groove design
- Large temperature range using the right O-ring

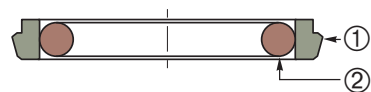
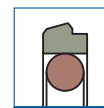
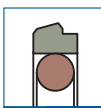
Please contact us for applications approaching maximum values.

D	d	L	O-ring NBR 70 Sh A	ISO 3320	Reference	D	d	L	O-ring NBR 70 Sh A	ISO 3320	Reference
14	9,1	2,2	8,75 x 1,8		17PSK000140-T46N	100	89,3	4,2	88,49 x 3,53		17PSK201000-M12N
16	11,1	2,2	10,6 x 1,8		• 17PSK000160-T46N	100	89,3	4,2	88,49 x 3,53		17PSK201000-T46N
18	10,7	3,2	9,19 x 2,62		17PSK100180-T46N	100	84,9	6,3	81,92 x 5,33	•	17PSK301000-T46N
20	15,1	2,2	14 x 1,78		• 17PSK000200-T46N	110	94,9	6,3	91,44 x 5,33		17PSK301100-T46N
20	12,7	3,2	12,37 x 2,62		• 17PSK100200-T46N	115	99,9	6,3	97,79 x 5,33		17PSK301150-T46N
22	14,7	3,2	13,94 x 2,62		17PSK100220-T46N	120	104,9	6,3	104,14 x 5,33		17PSK301200-T46N
25	17,7	3,2	17,12 x 2,62		• 17PSK100250-T46N	125	109,9	6,3	107,32 x 5,33	•	17PSK301250-T46N
30	19,3	4,2	18,66 x 3,53		17PSK200300-T46N	135	114,5	8,1	113,67 x 7		17PSK401350-T46N
32	21,3	4,2	20,22 x 3,53		• 17PSK200320-T46N	140	119,5	8,1	116,84 x 7		17PSK401400-M12N
35	24,3	4,2	23,4 x 3,53		17PSK200350-T46N	160	144,9	6,3	142,24 x 5,33	•	17PSK301600-T46N
40	32,7	3,2	31,42 x 2,62		• 17PSK100400-T46N	180	164,9	6,3	164,47 x 5,33		17PSK301800-T29N
40	29,3	4,2	28,17 x 3,53		• 17PSK200400-T46N	180	164,9	6,3	164,47 x 5,33		17PSK301800-T46N
50	39,3	4,2	37,69 x 3,53		• 17PSK200500-T46N	200	184,9	6,3	183,52 x 5,33	•	17PSK302000-T46N
55	44,3	4,2	44,04 x 3,53		17PSK200550-T46N	200	179,5	8,1	177,17 x 7	•	17PSK402000-T46N
60	44,9	6,3	43,82 x 5,33		17PSK300600-T46N	220	199,5	8,1	196,22 x 7		17PSK402200-T46N
63	52,3	4,2	50,39 x 3,53		• 17PSK200630-T46N	250	229,5	8,1	227,97 x 7	•	17PSK402500-T46N
63	47,9	6,3	46,99 x 5,33		• 17PSK300630-T46N	260	236	8,1	227,97 x 7		17PSK802600-T46N
70	54,9	6,3	53,34 x 5,33		17PSK300700-T46N	270	246	8,1	240,67 x 7		17PSK802700-T46N
75	59,9	6,3	56,52 x 5,33		17PSK300750-T29N	300	276	8,1	266,07 x 7		17PSK803000-T46N
75	59,9	6,3	56,52 x 5,33		17PSK300750-T46N	350	326	8,1	316,87 x 7		17PSK803500-T46N
80	64,9	6,3	62,87 x 5,33		• 17PSK300800-M12N	360	336	8,1	329,57 x 7		17PSK803600-T46N
80	64,9	6,3	62,87 x 5,33		• 17PSK300800-T46N	400	376	8,1	367,67 x 7	•	17PSK804000-T46N
85	69,9	6,3	69,22 x 5,33		17PSK300850-T46N	420	396	8,1	393,07 x 7		17PSK804200-T46N
90	74,9	6,3	72,39 x 5,33		17PSK300900-T46N						

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

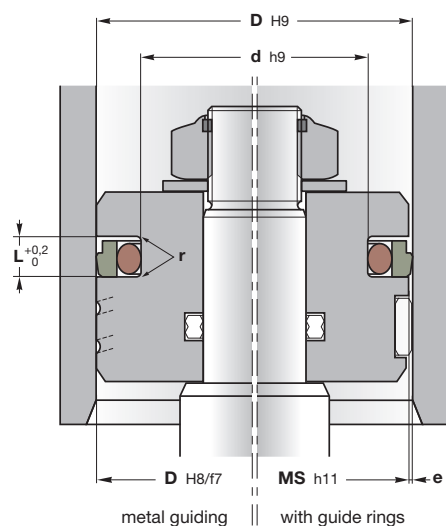
Serie	D (mm)			L (mm)	d (mm)	r (mm)	e (mm)				O-ring ②
	Standard serie	Light serie	Heavy serie				10 MPa	20 MPa	40 MPa	50 MPa	
PSK0	8 → 16,9	17 → 26,9		2,2	D - 4,9	0,4	≤ 0,3	≤ 0,2	≤ 0,15		1,78
PSK1	17 → 26,9	27 → 59,9		3,2	D - 7,3	0,6	≤ 0,4	≤ 0,25	≤ 0,15		2,62
PSK2	27 → 59,9	60 → 199,9	17 → 26,9	4,2	D - 10,7	1	≤ 0,5	≤ 0,3	≤ 0,2		3,53
PSK3	60 → 199,9	200 → 255,9	27 → 59,9	6,3	D - 15,1	1,3	≤ 0,7	≤ 0,4	≤ 0,25		5,34
PSK4	200 → 255,9	256 → 669,9	60 → 199,9	8,1	D - 20,5	1,8	≤ 0,8	≤ 0,6	≤ 0,35		7
PSK8	256 → 669,9	670 → 999,9	200 → 255,9	8,1	D - 24	1,8	≤ 0,9	≤ 0,7	≤ 0,4		7
PSK5	670 → 999,9	≥ 1000	256 → 669,9	9,5	D - 27,3	2,5	≤ 1	≤ 0,8	≤ 0,6		8,4
PSK6X	1000 → 2700			13,8	D - 38	3	≤ 1,2	≤ 0,9	≤ 0,6		12



17PSK...-T/M...V

Example of item code

17	PSK3	0	0800	-	T46	V
Sealtech code	Profile series	Type (standard)	Diameter D (mm x 10)		Material ①	Material ②



$$MS = D - 2e$$

✕ Machining of housings: see pages 48-49

17PSK Stepseal® 2K is a single acting seal element consisting of a seal ring of high-grade Turcon® material and an O-ring as energising element.

Stepseal® 2K was originally developed and patented by Trelleborg Sealing Solutions as a rod seal.

Due to its outstanding properties, however, it is equally well suited as a single acting piston seal where high demands are made on positional accuracy and free movement.

Operating conditions ✕ see page 8

Pressure	Turcon® T46: ≤ 50 MPa Turcon® T29: ≤ 30 MPa
Temperature	-20°C to 200°C
Speed	≤ 15 m/s
Fluids	✕ see pages 22-45

Materials ✕ see pages 10-19

Dynamic sealing element ①	Turcon® T46 Turcon® T29 NEW: Turcon® M12
Energising element ②	FPM 75 Sh A

Assembly ✕ see pages 54-59

On one-piece pistons

Advantages

- Low running friction
- No Stick-slip
- Long life
- Small sections
- Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
- Simple groove design
- Large temperature range using the right O-ring

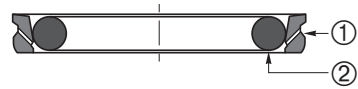
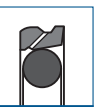
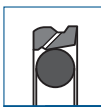
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

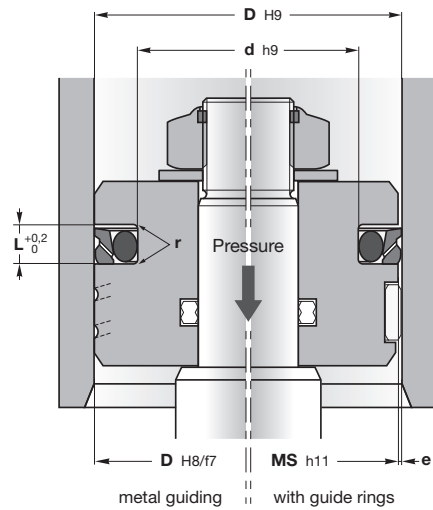
Serie	D (mm)			L (mm)	d (mm)	r (mm)	e (mm)				O-ring ②
	Standard serie	Light serie	Heavy serie				10 MPa	20 MPa	40 MPa	50 MPa	
PSK0	8 → 16,9	17 → 26,9		2,2	D - 4,9	0,4	≤ 0,3	≤ 0,2	≤ 0,15		1,78
PSK1	17 → 26,9	27 → 59,9		3,2	D - 7,3	0,6	≤ 0,4	≤ 0,25	≤ 0,15		2,62
PSK2	27 → 59,9	60 → 199,9	17 → 26,9	4,2	D - 10,7	1	≤ 0,5	≤ 0,3	≤ 0,2		3,53
PSK3	60 → 199,9	200 → 255,9	27 → 59,9	6,3	D - 15,1	1,3	≤ 0,7	≤ 0,4	≤ 0,25		5,34
PSK4	200 → 255,9	256 → 669,9	60 → 199,9	8,1	D - 20,5	1,8	≤ 0,8	≤ 0,6	≤ 0,35		7
PSK8	256 → 669,9	670 → 999,9	200 → 255,9	8,1	D - 24	1,8	≤ 0,9	≤ 0,7	≤ 0,4		7
PSK5	670 → 999,9	≥ 1000	256 → 669,9	9,5	D - 27,3	2,5	≤ 1	≤ 0,8	≤ 0,6		8,4
PSK6X	1000 → 2700			13,8	D - 38	3	≤ 1,2	≤ 0,9	≤ 0,6		12

D	d	L	O-ring FPM 75 Sh A	ISO 3320	Reference	D	d	L	O-ring FPM 75 Sh A	ISO 3320	Reference
14	9,1	2,2	8,75 x 1,8		17PSK000140-T46V	100	89,3	4,2	88,49 x 3,53		17PSK201000-M12V
16	11,1	2,2	10,6 x 1,8		• 17PSK000160-T46V	100	89,3	4,2	88,49 x 3,53		17PSK201000-T46V
18	10,7	3,2	9,19 x 2,62		17PSK100180-T46V	100	84,9	6,3	81,92 x 5,33	•	17PSK301000-T46V
20	15,1	2,2	14 x 1,78		• 17PSK000200-T46V	110	94,9	6,3	91,44 x 5,33		17PSK301100-T46V
20	12,7	3,2	12,37 x 2,62		• 17PSK100200-T46V	115	99,9	6,3	97,79 x 5,33		17PSK301150-T46V
22	14,7	3,2	13,94 x 2,62		17PSK100220-T46V	120	104,9	6,3	104,14 x 5,33		17PSK301200-T46V
25	17,7	3,2	17,12 x 2,62		• 17PSK100250-T46V	125	109,9	6,3	107,32 x 5,33	•	17PSK301250-T46V
30	19,3	4,2	18,66 x 3,53		17PSK200300-T46V	135	114,5	8,1	113,67 x 7		17PSK401350-T46V
32	21,3	4,2	20,22 x 3,53		• 17PSK200320-T46V	140	119,5	8,1	116,84 x 7		17PSK401400-M12V
35	24,3	4,2	23,4 x 3,53		17PSK200350-T46V	160	144,9	6,3	142,24 x 5,33	•	17PSK301600-T46V
40	32,7	3,2	31,42 x 2,62		• 17PSK100400-T46V	180	164,9	6,3	164,47 x 5,33		17PSK301800-T29V
40	29,3	4,2	28,17 x 3,53		• 17PSK200400-T46V	180	164,9	6,3	164,47 x 5,33		17PSK301800-T46V
50	39,3	4,2	37,69 x 3,53		• 17PSK200500-T46V	200	184,9	6,3	183,52 x 5,33	•	17PSK302000-T46V
55	44,3	4,2	44,04 x 3,53		17PSK200550-T46V	200	179,5	8,1	177,17 x 7	•	17PSK402000-T46V
60	44,9	6,3	43,82 x 5,33		17PSK300600-T46V	220	199,5	8,1	196,22 x 7		17PSK402200-T46V
63	52,3	4,2	50,39 x 3,53		• 17PSK200630-T46V	250	229,5	8,1	227,97 x 7	•	17PSK402500-T46V
63	47,9	6,3	46,99 x 5,33		• 17PSK300630-T46V	260	236	8,1	227,97 x 7		17PSK802600-T46V
70	54,9	6,3	53,34 x 5,33		17PSK300700-T46V	270	246	8,1	240,67 x 7		17PSK802700-T46V
75	59,9	6,3	56,52 x 5,33		17PSK300750-T29V	300	276	8,1	266,07 x 7		17PSK803000-T46V
75	59,9	6,3	56,52 x 5,33		17PSK300750-T46V	350	326	8,1	316,87 x 7		17PSK803500-T46V
80	64,9	6,3	62,87 x 5,33		• 17PSK300800-M12V	360	336	8,1	329,57 x 7		17PSK803600-T46V
80	64,9	6,3	62,87 x 5,33		• 17PSK300800-T46V	400	376	8,1	367,67 x 7	•	17PSK804000-T46V
85	69,9	6,3	69,22 x 5,33		17PSK300850-T46V	420	396	8,1	393,07 x 7		17PSK804200-T46V
90	74,9	6,3	72,39 x 5,33		17PSK300900-T46V						

**17PSV...-T/M...N**

Example of item code

17 PSV3 0 0800 - T46 N
Sealtech Profile Type Diameter Material
code serie (standard) D (mm x 10)



$$MS = D - 2e$$

✕ Machining of housings: see pages 48-49

17PSV Stepseal® V has the efficient seal performance of the Turcon® Stepseal® range and the reliable prevention of pressure build-up brought by a refined check valve function. In dynamic applications Stepseal® V brings efficient, reliable sealing performance under even the most demanding service conditions.

Stepseal® V offers a uniform, low friction characteristic of the sealing system throughout its whole life, by preventing undefined pressurization of the secondary seal element.

Operating conditions

✕ see page 8

Pressure
17PSV...-M12N ≤ 50 MPa
17PSV...-T46N ≤ 50 MPa
Temperature -30°C to 100°C
Speed ≤ 15 m/s
Fluids ✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①
17PSV...-M12N Turcon® M12
17PSV...-T46N Turcon® T46
Energising element ② NBR 70 Sh A

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

Low running friction
No Stick-slip
Long service life
Small housing and simple groove design
Check valve function
Stabilised position in the groove
Hydrodynamic back-pumping

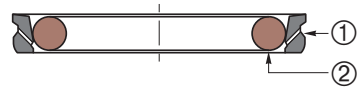
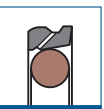
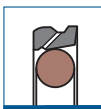
Please contact us for applications approaching maximum values.

D	d	L	r	O-ring NBR 70 Sh A	ISO 3320	Reference
140	119,5	8,1	1,8	116,84 x 7		17PSV401400-M12N
200	179,5	8,1	1,8	177,17 x 7	•	17PSV402000-T46N
220	199,5	8,1	1,8	196,22 x 7		17PSV402200-M12N
250	226	8,1	1,8	227,97 x 7	•	17PSV802500-T46N
270	246	8,1	1,8	240,67 x 7		17PSV802700-T46N
360	336	8,1	1,8	329,57 x 7		17PSV803600-T46N

More information

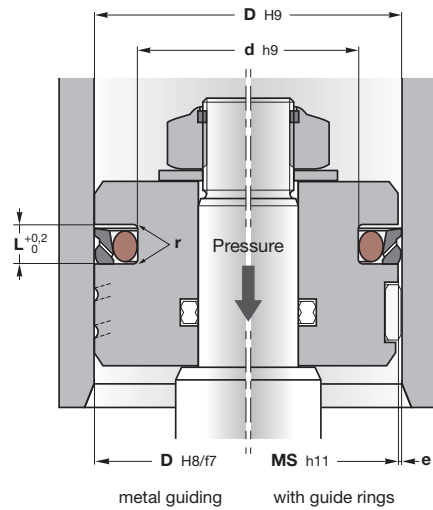
On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Serie	D (mm)			L (mm)	d (mm)	r (mm)	e (mm)				O-ring ②
	Standard serie	Light serie	Heavy serie				10 MPa	20 MPa	40 MPa	50 MPa	
PSV2	25 → 59,9	60 → 199,9	15 → 24,9	4,2	D - 10,7	1	≤ 0,5	≤ 0,3	≤ 0,2		3,53
PSV3	60 → 199,9	200 → 255,9	25 → 59,9	6,3	D - 15,1	1,3	≤ 0,7	≤ 0,4	≤ 0,25		5,34
PSV4	200 → 255,9	256 → 669,9	60 → 199,9	8,1	D - 20,5	1,8	≤ 0,8	≤ 0,6	≤ 0,35		7
PSV8	256 → 669,9	670 → 999,9	200 → 255,9	8,1	D - 24	1,8	≤ 0,9	≤ 0,7	≤ 0,4		7
PSV5	670 → 999,9		256 → 669,9	9,5	D - 27,3	2,5	≤ 1	≤ 0,8	≤ 0,5		8,4
PSV5X		1000 → 1200		9,5	D - 27,3	2,5	≤ 1	≤ 0,8	≤ 0,5		8,4
PSV6**			670 → 999,9	13,8	D - 38	3	≤ 1,2	≤ 0,9	≤ 0,6		12
PSV6X**	1000 → 2700			13,8	D - 38	3	≤ 1,2	≤ 0,9	≤ 0,6		12

**17PSV...-T/M...V**

Example of item code

17 PSV3 0 0800 - T46 V
Sealtech Profile Type Diameter Material
code serie (standard) D (mm x 10) ① ②



$$MS = D - 2e$$

✕ Machining of housings: see pages 48-49

17PSV Stepseal® V has the efficient seal performance of the Turcon® Stepseal® range and the reliable prevention of pressure build-up brought by a refined check valve function. In dynamic applications Stepseal® V brings efficient, reliable sealing performance under even the most demanding service conditions.

Stepseal® V offers a uniform, low friction characteristic of the sealing system throughout its whole life, by preventing undefined pressurization of the secondary seal element.

Operating conditions

✕ see page 8

Pressure
17PSV...-M12V ≤ 50 MPa
17PSV...-T46V ≤ 50 MPa
Temperature -20°C to 200°C
Speed ≤ 15 m/s
Fluids ✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①
17PSV...-M12V Turcon® M12
17PSV...-T46V Turcon® T46
Energising element ② FPM 75 Sh A

Assembly

✕ see pages 54-59

On one-piece pistons

Advantages

Low running friction
No Stick-slip
Long service life
Small housing and simple groove design
Check valve function
Stabilised position in the groove
Hydrodynamic back-pumping

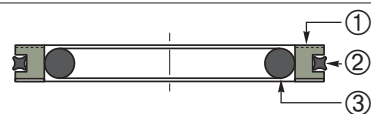
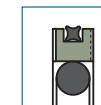
Please contact us for applications approaching maximum values.

D	d	L	r	O-ring FPM 75 Sh A	ISO 3320	Reference
140	119,5	8,1	1,8	116,84 x 7	•	17PSV401400-M12V
200	179,5	8,1	1,8	177,17 x 7		17PSV402000-T46V
220	199,5	8,1	1,8	196,22 x 7		17PSV402200-M12V
250	226	8,1	1,8	227,97 x 7	•	17PSV802500-T46V
270	246	8,1	1,8	240,67 x 7		17PSV802700-T46V
360	336	8,1	1,8	329,57 x 7		17PSV803600-T46V

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

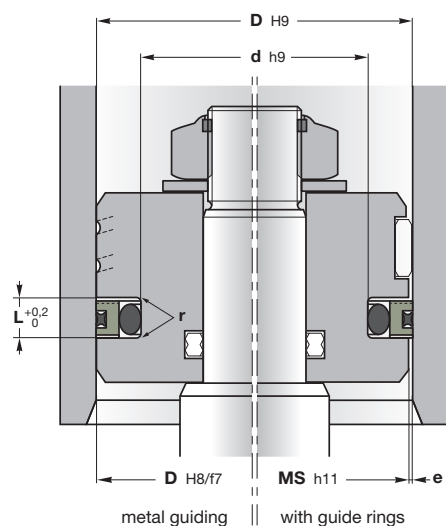
Serie	D (mm)			L (mm)	d (mm)	r (mm)	e (mm)				O-ring ②
	Standard serie	Light serie	Heavy serie				10 MPa	20 MPa	40 MPa	50 MPa	
PSV2	25 → 59,9	60 → 199,9	15 → 24,9	4,2	D - 10,7	1	≤ 0,5	≤ 0,3	≤ 0,2	H8/f8	3,53
PSV3	60 → 199,9	200 → 255,9	25 → 59,9	6,3	D - 15,1	1,3	≤ 0,7	≤ 0,4	≤ 0,25		5,34
PSV4	200 → 255,9	256 → 669,9	60 → 199,9	8,1	D - 20,5	1,8	≤ 0,8	≤ 0,6	≤ 0,35		7
PSV8	256 → 669,9	670 → 999,9	200 → 255,9	8,1	D - 24	1,8	≤ 0,9	≤ 0,7	≤ 0,4		7
PSV5	670 → 999,9		256 → 669,9	9,5	D - 27,3	2,5	≤ 1	≤ 0,8	≤ 0,5		8,4
PSV5X		1000 → 1200		9,5	D - 27,3	2,5	≤ 1	≤ 0,8	≤ 0,5		8,4
PSV6**			670 → 999,9	13,8	D - 38	3	≤ 1,2	≤ 0,9	≤ 0,6		12
PSV6X**	1000 → 2700			13,8	D - 38	3	≤ 1,2	≤ 0,9	≤ 0,6		12



17PQ

Example of item code

17 PQ14 0 0800 - T46 N
 Sealtech Profile Type Diameter Material Material
 code serie (standard) **D** (mm x 10) ① ②/③



$$MS = D - 2e$$

 **Machining of housings:** see pages 48-49

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

17PQ Turcon® AQ-Seal® is a double acting seal consisting of a seal ring of high grade modified Turcon material, a X-ring Seal and an O-ring as energising element.

The Turcon® seal ring and the X-ring Seal together assume the dynamic sealing function whilst the O-ring performs the static sealing function.

The **AQ-Seal®** is supplied as standard with radial notches on both sides. These ensure direct pressurising of the seal under all operating conditions.

The Turcon **AQ-Seal®** is the recommended sealing element for double acting pistons of positioning and holding cylinders.

Operating conditions

 see page 8

Pressure	with mineral oils: ≤ 40 MPa low lubricating media: ≤ 25 MPa
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Temperature -30°C to 100°C

Speed ≤ 2 m/s

Fluids  see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ① Turcon® T46

NEW: Turcon® M12

Dynamic sealing element ② NBR 70 Sh: Code N

Energising element ③ NBR 70 Sh: Code N

Assembly

 see pages 54-59

On one-piece pistons

Advantages

High sealing effect in applications requiring media separation, e.g. fluid/fluid or fluid/gas

Low running friction

Excellent abrasion resistance

Long service life

Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds

Simple groove design

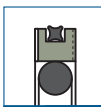
Large temperature range using the right O-ring and X-ring

Please contact us for applications approaching maximum values.

Serie		D (mm)		d (mm)	L (mm)	r (mm)	e (mm)			0-ring ③	QR ②
Standard	Light	Standard serie	Light serie				10 MPa	20 MPa	40 MPa		
PQ12	PQ14	15→39,9 40→79,9	40→79,9 80→132,9	D - 11 D - 15,5	4,2 6,3	1 1,3	≤ 0,25 ≤ 0,3	≤ 0,15 ≤ 0,2	≤ 0,1 ≤ 0,15	3,53 5,34	1,78 1,78
PQ22	PQ24	80→132,9 133→252,9	133→252,9	D - 21 D - 24,5	8,1 8,1	1,8 1,8	≤ 0,3 ≤ 0,3	≤ 0,2 ≤ 0,2	≤ 0,15 ≤ 0,15	7 7	2,62 2,62
PQ32 PQ52		253→462,9 463→700		D - 28 D - 35	9,5 11,5	2,5 3	≤ 0,45 ≤ 0,55	≤ 0,3 ≤ 0,4	≤ 0,25 ≤ 0,35	8,4 10	3,53 5,34

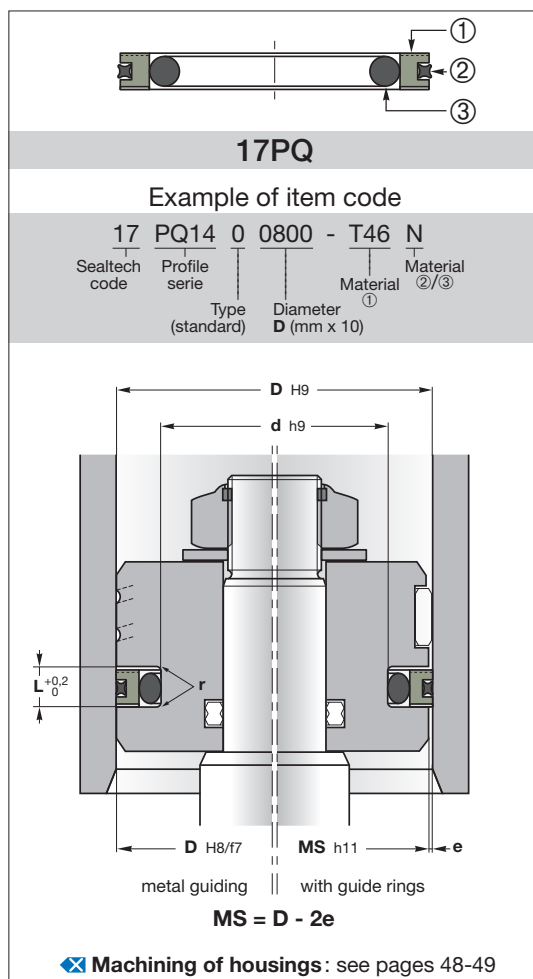
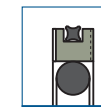
D	d	L	r	O-ring ③ NBR 70 Sh A	X-ring ② NBR 70 Sh A	ISO 3320	Reference
16	5	4,2	1	4,34 x 3,53	12,42 x 1,78	•	17PQ1200160-T46N
25	14	4,2	1	13,87 x 3,53	20,35 x 1,78		17PQ1200250-T46N
30	19	4,2	1	18,66 x 3,53	25,12 x 1,78		17PQ1200300-T46N
32	21	4,2	1	20,22 x 3,53	26,70 x 1,78	•	17PQ1200320-T46N
35	24	4,2	1	23,40 x 3,53	29,87 x 1,78		17PQ1200350-T46N
40	29	4,2	1	28,17 x 3,53	34,65 x 1,78	•	17PQ1400400-T46N
45	34	4,2	1	32,92 x 3,53	37,82 x 1,78		17PQ1400450-T46N
50	34,5	6,3	1,3	32,69 x 5,34	44,17 x 1,78	•	17PQ1200500-M12N
50	39	4,2	1	37,69 x 3,53	44,17 x 1,78		17PQ1400500-T46N
55	44	4,2	1	44,04 x 3,53	50,52 x 1,78	•	17PQ1400550-T46N
60	44,5	6,3	1,3	43,83 x 5,34	53,7 x 1,78		17PQ1200600-T46N
60	49	4,2	1	47,22 x 3,53	53,70 x 1,78		17PQ1400600-T46N
63	47,5	6,3	1,3	46,99 x 5,34	56,87 x 1,78	•	17PQ1200630-T46N
63	52	4,2	1	50,39 x 3,53	56,87 x 1,78		17PQ1400630-T46N
65	54	4,2	1	53,57 x 3,53	60,05 x 1,78		17PQ1400650-T46N
70	54,5	6,3	1,3	53,34 x 5,34	63,22 x 1,78	•	17PQ1200700-T46N
70	59	4,2	1	56,74 x 3,53	63,22 x 1,78		17PQ1400700-T46N
75	64	4,2	1	63,09 x 3,53	69,57 x 1,78		17PQ1400750-T46N
80	59	8,1	1,8	58,00 x 7,00	71,12 x 2,62	•	17PQ2200800-T46N
80	64,5	6,3	1,3	62,87 x 5,34	72,75 x 1,78		17PQ1400800-T46N
90	74,5	6,3	1,3	72,39 x 5,34	82,27 x 1,78		17PQ1400900-T46N
95	79,5	6,3	1,3	78,74 x 5,34	88,62 x 1,78	•	17PQ1400950-T46N
100	79	8,1	1,8	78,00 x 7,00	88,57 x 2,62		17PQ2201000-M12N
100	79	8,1	1,8	78,00 x 7,00	88,57 x 2,62		17PQ2201000-T46N
100	84,5	6,3	1,3	81,92 x 5,34	88,62 x 1,78	•	17PQ1401000-T46N
110	89	8,1	1,8	88,00 x 7,00	101,27 x 2,62		17PQ2201100-T46N
110	94,5	6,3	1,3	91,44 x 5,34	101,32 x 1,78		17PQ1401100-T46N
115	94	8,1	1,8	93,00 x 7,00	107,62 x 2,62	•	17PQ2201150-T46N
120	99	8,1	1,8	98,00 x 7,00	107,62 x 2,62		17PQ2201200-T46N
120	104,5	6,3	1,3	100,97 x 5,34	114,02 x 1,78		17PQ1401200-T46N
125	104	8,1	1,8	103,00 x 7,00	113,97 x 2,62	•	17PQ2201250-T46N
125	109,5	6,3	1,3	107,32 x 5,34	114,02 x 1,78		17PQ1401250-T46N
130	114,5	6,3	1,3	113,67 x 5,34	120,37 x 1,78		17PQ1401300-T46N
140	119	8,1	1,8	116,84 x 7,00	126,67 x 2,62	•	17PQ2401400-T46N
150	129	8,1	1,8	126,37 x 7,00	139,37 x 2,62		17PQ2401500-T46N
160	139	8,1	1,8	135,89 x 7,00	145,72 x 2,62		17PQ2401600-T46N
170	149	8,1	1,8	145,42 x 7,00	158,42 x 2,62	•	17PQ2401700-T46N
180	159	8,1	1,8	158,12 x 7,00	171,12 x 2,62		17PQ2401800-T46N
200	179	8,1	1,8	177,17 x 7,00	190,17 x 2,62		17PQ2402000-M12N
200	179	8,1	1,8	177,17 x 7,00	190,17 x 2,62	•	17PQ2402000-T46N
200	179	8,1	1,8	177,17 x 7,00	190,17 x 2,62		17PQB402000-M12N
220	199	8,1	1,8	196,22 x 7,00	202,87 x 2,62		17PQ2402200-T46N
220	199	8,1	1,8	196,22 x 7,00	202,87 x 2,62	•	17PQB402200-M12N
250	225,5	8,1	1,8	227,97 x 7,00	234,62 x 2,62		17PQ2202500-T46N
250	229	8,1	1,8	227,97 x 7,00	234,62 x 2,62		17PQ2402500-T46N

17PQ seals with diameters between 20 and 1500 mm can be manufactured within short delivery time.
For prices and availability: **www.sealtech-business.be**



17PQ

Turcon® AQ-Seal®

SEALTECH
Hydraulic Seals Technology

17PQ Turcon® AQ-Seal® is a double acting seal consisting of a seal ring of high grade modified Turcon material, a X-ring Seal and an O-ring as energising element.

The Turcon® seal ring and the X-ring Seal together assume the dynamic sealing function whilst the O-ring performs the static sealing function.

The **AQ-Seal®** is supplied as standard with radial notches on both sides. These ensure direct pressurising of the seal under all operating conditions.

The Turcon **AQ-Seal®** is the recommended sealing element for double acting pistons of positioning and holding cylinders.

Operating conditions

⚙️ see page 8

Pressure with mineral oils: ≤ 40 MPa
low lubricating media: ≤ 25 MPa

Temperature -30°C to 100°C

Speed ≤ 2 m/s

Fluids ⚙️ see pages 22-45

Materials

⚙️ see pages 10-19

Dynamic sealing element ① Turcon® T46

NEW: Turcon® M12

Dynamic sealing element ② NBR 70 Sh: Code N

Energising element ③ NBR 70 Sh: Code N

Assembly

⚙️ see pages 54-59

On one-piece pistons

Advantages

High sealing effect in applications requiring media separation, e.g. fluid/fluid or fluid/gas

Low running friction

Excellent abrasion resistance

Long service life

Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds

Simple groove design

Large temperature range using the right O-ring and X-ring

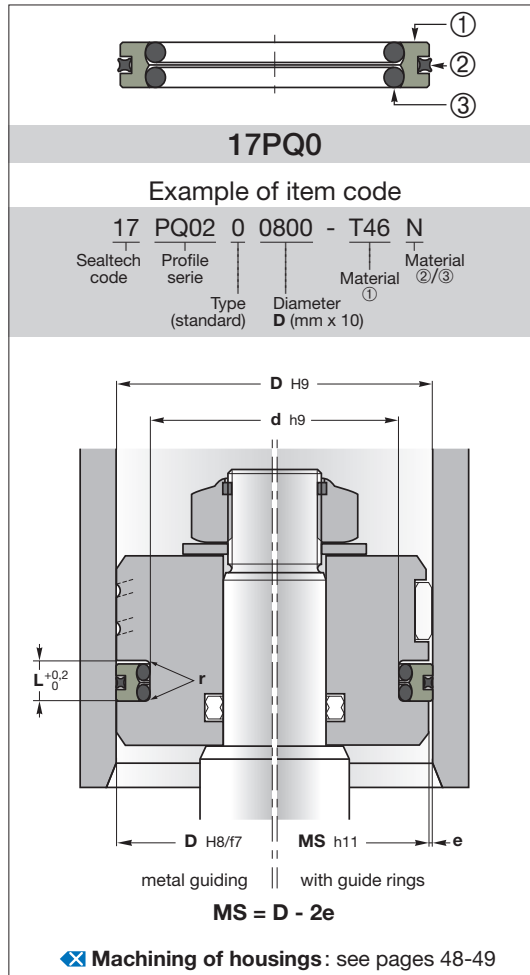
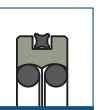
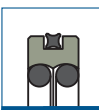
Please contact us for applications approaching maximum values.

D	d	L	r	O-ring ③ NBR 70 Sh A	X-ring ② NBR 70 Sh A	ISO 3320	Reference
260	232	9,5	2,5	229,5 x 8,4	247,26 x 3,53		17PQ3202600-T46N
280	252	9,5	2,5	250,00 x 8,40	266,29 x 3,53		17PQ3202800-T46N
300	272	9,5	2,5	270,00 x 8,40	278,99 x 3,53		17PQ3203000-T46N
320	292	9,5	2,5	304,00 x 8,40	304,39 x 3,53		17PQ3203200-T46N
400	372	9,5	2,5	370,00 x 8,40	380,59 x 3,53		17PQ3204000-T46N
450	422	9,5	2,5	420,00 x 8,40	430,66 x 3,53		17PQ3204500-T46N

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

Serie		D (mm)		d (mm)	L (mm)	r (mm)	e (mm)			0-ring ③	QR ②
Standard	Light	Standard series	Light series				10 MPa	20 MPa	40 MPa		
PQ12	PQ14	15→39,9	40→79,9	D - 11	4,2	1	≤ 0,25	≤ 0,15	≤ 0,1	3,53	1,78
		40→79,9	80→132,9	D - 15,5	6,3	1,3	≤ 0,3	≤ 0,2	≤ 0,15	5,34	1,78
PQ22	PQ24	80→132,9	133→252,9	D - 21	8,1	1,8	≤ 0,3	≤ 0,2	≤ 0,15	7	2,62
		133→252,9		D - 24,5	8,1	1,8	≤ 0,3	≤ 0,2	≤ 0,15	7	2,62
PQ32 PQ52		253→462,9		D - 28	9,5	2,5	≤ 0,45	≤ 0,3	≤ 0,25	8,4	3,53
		463→700		D - 35	11,5	3	≤ 0,55	≤ 0,4	≤ 0,35	10	5,34

**More information**

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

17PQ0 Turcon® AQ-Seal® 5 is a patented development of the proven standard Turcon® AQ-Seal®. Two O-rings are used to energise the seal instead of one.

Turcon® AQ-Seal® 5 combines the benefits of a low-friction Turcon® slipper seal with the high sealing characteristics of an elastomeric seal by incorporating a X-ring seal in the dynamic sealing face. This optimises leakage control while minimising friction.

The particular characteristics of the **AQ-Seal® 5** are the special seal profile with a defined seal edge and the use of two O-rings as energising elements to optimise the pressure profile and to reduce the force of attack at gas permeability.

Operating conditions

✕ see page 8

Pressure Turcon® T46: ≤ 50 MPa
low lubricating media: ≤ 25 MPa
Temperature -30°C to 100°C
Speed ≤ 3 m/s
Fluids ✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ① Turcon® T46
NEW: Turcon® M12
Dynamic sealing element NBR 70 Sh: Code N
Energising element ③ NBR 70 Sh: Code N

Assembly

✕ see pages 54-59

On one-piece pistons

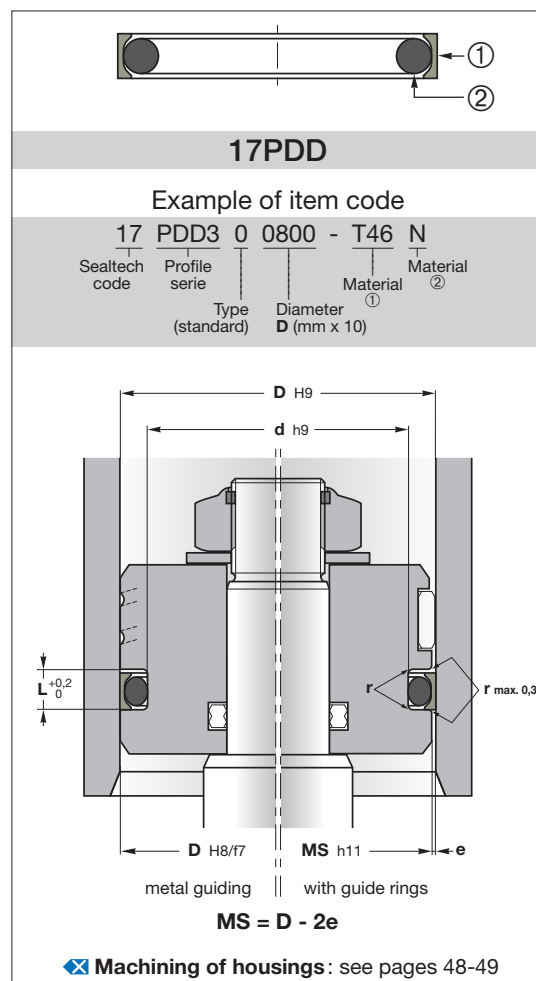
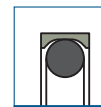
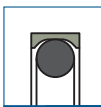
Advantages

High sealing effect in applications requiring media separation, e.g. fluid/fluid or fluid/gas
Low running friction
Excellent abrasion resistance
Long service life
Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
Simple groove design
Large temperature range using the right O-ring and X-ring

Please contact us for applications approaching maximum values.

D	d	L	r	O-ring ③ 2 pieces NBR 70 Sh A	X-ring ② NBR 70 Sh A	ISO 3320	Reference
32	22	6,3	0,6	21,89 x 2,62	26,7 x 1,78	•	17PQ0100320-T46N
40	30	6,3	0,6	29,82 x 2,62	34,65 x 1,78	•	17PQ0100400-T46N
50	40	6,3	0,6	39,34 x 2,62	44,17 x 1,78	•	17PQ0100500-T46N
55	45	6,3	0,6	44,12 x 2,62	50,52 x 1,78		17PQ0100550-T46N
60	50	6,3	0,6	48,90 x 2,62	53,70 x 1,78		17PQ0100600-T46N
63	53	6,3	0,6	52,07 x 2,62	56,87 x 1,78	•	17PQ0100630-T46N
70	60	6,3	0,6	58,42 x 2,62	63,22 x 1,78		17PQ0100700-T46N
80	67	8,3	1	66,27 x 3,53	71,12 x 2,62	•	17PQ0200800-T46N
90	77	8,3	1	75,79 x 3,53	82,22 x 2,62		17PQ0200900-T46N
100	87	8,3	1	85,32 x 3,53	88,57 x 2,62	•	17PQ0201000-T46N
110	97	8,3	1	94,84 x 3,53	101,27 x 2,62		17PQ0201100-T46N
120	107	8,3	1	104,37 x 3,53	107,62 x 2,62		17PQ0201200-T46N
125	112	8,3	1	110,72 x 3,53	113,97 x 2,62	•	17PQ0201250-T46N
130	117	8,3	1	113,89 x 3,53	120,32 x 2,62		17PQ0201300-T46N
140	122	12,3	1,3	120,02 x 5,34	126,59 x 3,53		17PQ0301400-T46N
150	132	12,3	1,3	129,54 x 5,34	136,12 x 3,53		17PQ0301500-T46N
160	142	12,3	1,3	139,07 x 5,34	145,64 x 3,53	•	17PQ0301600-T46N
170	152	12,3	1,3	148,49 x 5,34	158,34 x 3,53		17PQ0301700-T46N
180	162	12,3	1,3	158,12 x 5,34	164,69 x 3,53		17PQ0301800-T46N
200	182	12,3	1,3	177,17 x 5,34	183,74 x 3,53	•	17PQ0302000-T46N
220	202	12,3	1,3	196,22 x 5,34	202,79 x 3,53		17PQ0302200-T46N
230	212	12,3	1,3	208,92 x 5,34	215,49 x 3,53		17PQ0302300-T46N
240	222	12,3	1,3	221,62 x 5,34	221,84 x 3,53	•	17PQ0302400-T46N
250	232	12,3	1,3	227,97 x 5,34	234,54 x 3,53	•	17PQ0302500-T46N
280	262	12,3	1,3	253,37 x 5,34	266,29 x 3,53		17PQ0302800-T46N
300	282	12,3	1,3	278,77 x 5,34	278,99 x 3,53		17PQ0303000-T46N
320	302	12,3	1,3	291,47 x 5,34	304,39 x 3,53	•	17PQ0303200-T46N
360	342	12,3	1,3	329,57 x 5,34	329,79 x 3,53		17PQ0303600-T46N
540	509	16,3	1,8	506,86 x 7	506,81 x 5,34		17PQ0405400-T46N

Serie	D (mm)		d (mm)	L (mm)	r (mm)	e (mm)				O-ring ③	QR ②
	Recommended range	Extended range				10 MPa	20 MPa	30 MPa	50 MPa		
PQ01	40 → 79,9	25 → 140	D - 10	6,3	0,6	≤ 0,3	≤ 0,2	≤ 0,15		2,62	1,78
PQ02	80 → 132,9	50 → 250	D - 13	8,3	1	≤ 0,4	≤ 0,3	≤ 0,15		3,53	2,63
PQ03	133 → 462,9	100 → 480	D - 18	12,3	1,3	≤ 0,4	≤ 0,3	≤ 0,2		5,33	3,53
PQ04	463 → 700	425 → 700	D - 31	16,3	1,8	≤ 0,5	≤ 0,4	≤ 0,3		7	5,33



17PDD Turcon® Double Delta® is a double acting rubber energised plastic faced seal.

The seal is designed to expand and improve the service parameters of O-rings and is installed in existing O-ring grooves.

Double Delta® combines the flexibility and response of O-rings with the wear and friction characteristics of the Turcon materials in dynamic applications. When the system pressure is increased the O-ring transforms this into additional contact pressure, the contact pressures of the seal is thereby automatically adjusted so sealing is ensured under all service conditions.

Operating conditions

✕ see page 8

Pressure	≤ 35 MPa
Temperature	-30°C to 100°C
Speed	≤ 15 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Dynamic sealing element ①	Turcon® T46
Energising element ②	NBR 70 Sh: Code N

Assembly

✕ see pages 54-59

On one-piece pistons

Advantage

Efficient sealing
Low running friction
Excellent abrasion resistance
Long service life
Compatibility with nearly all media due to the high chemical resistance of the sealing element and the wide selection of O-ring compounds
Large temperature range using the right O-ring

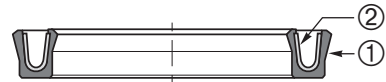
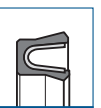
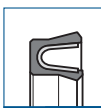
Please contact us for applications approaching maximum values.

More information

On www.sealtech-business.be, click first on the reference and then on the material code to obtain the data sheet of the different materials.

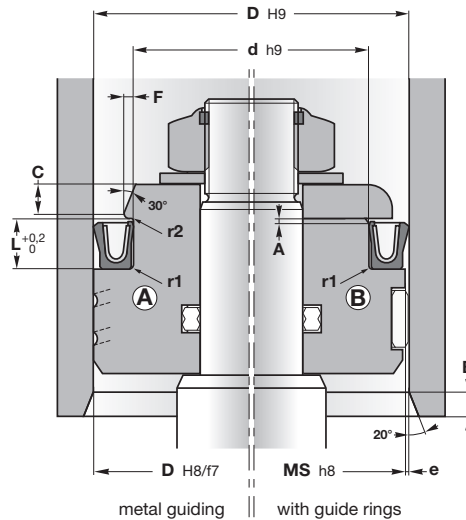
D	d	L	O-ring NBR 70 Sh A	ISO 3320	Reference
16	11,5	3,6	2,62 x 10,77	•	17PDD100160-T46N
20	15,5	3,6	2,62 x 13,94	•	17PDD100200-T46N
25	18,8	4,8	3,55 x 18	•	17PDD200250-T46N
30	23,8	4,8	3,53 x 23,4	•	17PDD200300-T46N
32	25,8	4,8	3,53 x 25	•	17PDD200320-T46N
40	33,8	4,8	3,53 x 32,92	•	17PDD200400-T46N
50	40,6	7,1	5,30 x 4	•	17PDD300500-T46N
60	50,6	7,1	5,34 x 50,17	•	17PDD300600-T46N
63	53,6	7,1	5,34 x 53,34	•	17PDD300630-T46N
70	60,6	7,1	5,34 x 59,69	•	17PDD300700-T46N
80	70,6	7,1	5,34 x 69,22	•	17PDD300800-T46N
90	80,6	7,1	5,34 x 78,74	•	17PDD300900-T46N
100	90,6	7,1	5,34 x 88,27	•	17PDD301000-T46N
110	100,6	7,1	5,34 x 97,79	•	17PDD301100-T46N
125	112,8	9,5	7 x 113,67	•	17PDD401250-T46N
140	127,8	9,5	7 x 126,37	•	17PDD401400-T46N
160	147,8	9,5	7 x 145,42	•	17PDD401600-T46N
180	167,8	9,5	7 x 164,47	•	17PDD401800-T46N
200	187,8	9,5	7 x 183,52	•	17PDD402000-T46N

Serie	D (mm)		d (mm)	L (mm)	r (mm)	e (mm)			O-ring ②
	Recommended range	Extended range				10 MPa	20 MPa	35 MPa	
PDD0	5 → 13,9	5 → 139,9	D - 2,9	2,4	0,4	≤ 0,1	≤ 0,08	≤ 0,05	1,78
PDD1	14 → 24,9	8 → 259,9	D - 4,5	3,6	0,4	≤ 0,15	≤ 0,1	≤ 0,07	2,62
PDD2	25 → 45,9	12 → 469,9	D - 6,2	4,8	0,6	≤ 0,2	≤ 0,15	≤ 0,08	3,53
PDD3	46 → 124,9	20 → 669,9	D - 9,4	7,1	0,8	≤ 0,25	≤ 0,2	≤ 0,1	5,34
PDD4	125 → 669,9	80 → 999,9	D - 12,2	9,5	0,8	≤ 0,3	≤ 0,25	≤ 0,15	7
PDD5	670 → 999,9	125 → 999,9	D - 15	10	1	≤ 0,4	≤ 0,3	≤ 0,2	8,4

**17PVA**

Example of item code

17	PVA2	0	0800	-	T40	S
Sealtech code	Profile serie	Type (standard)	Diameter D (mm x 10)		Material ①	Material ②



$$MS = D - 2e$$

✕ Machining of housings: see pages 48-49

17PVA Turcon® Variseal® M2 is a single acting seal consisting of a U-shaped seal jacket and a V-shaped corrosion resistant spring.

Variseal® M2 has an asymmetric seal profile. The heavy profile of its dynamic lip with an optimised front angle offers good leakage control, reduced friction and long service life. At low and zero pressure, the metal spring provides the primary sealing force.

As the system pressure increases, the main sealing force is achieved by the system pressure and ensures a tight seal from zero to high pressure. The possibility of matching suitable materials for the seal and the spring allows use in a wide range of applications beyond the field of hydraulics, e.g. in the chemical, pharmaceutical and foodstuffs industry.

Operating conditions

✕ see page 8

Pressure	
T40	≤ 40 MPa
T05	≤ 20 MPa
Z80	≤ 40 MPa
Temperature	
T40 / T05	-70°C to 260°C
Z80	-70°C to 80°C
Speed	
T40 / T05	≤ 15 m/s
Z80	≤ 2 m/s
Fluids	✕ see pages 22-45

Materials

✕ see pages 10-19

Seal ①	T40, T05, Z80
Spring ②	AISI 301 = S
	On demand: Elgiloy®, Hastelloy®

Assembly

✕ see pages 54-59

- On one-piece pistons (A)
- On two-piece pistons (B)

Advantage

- Resistant to the most fluids
- Low coefficient of friction
- High abrasion resistance
- No stick-slip: precision of operating control
- Small section
- Very high temperature range

Serie	D (mm)	d (mm)	L (mm)	F (mm)	r1 (mm)	r2 (mm)	A (mm)	B (mm)	C (mm)	e (mm)			
										2 MPa	10 MPa	20 MPa	40 MPa
PVA0	6 → 13,9	D - 2,9	2,4	0,4	0,25	0,15	0,3	1,2	0,7	≤ 0,2	≤ 0,1	≤ 0,08	≤ 0,05
PVA1	14 → 24,9	D - 4,5	3,6	0,6	0,4	0,15	0,4	1,5	1,1	≤ 0,25	≤ 0,15	≤ 0,1	≤ 0,07
PVA2	25 → 45,9	D - 6,2	4,8	0,7	0,4	0,2	0,4	2,5	1,3	≤ 0,35	≤ 0,2	≤ 0,15	≤ 0,08
PVA3	46 → 124,9	D - 9,4	7,1	0,8	0,4	0,25	0,6	4,5	1,4	≤ 0,5	≤ 0,25	≤ 0,2	≤ 0,1
PVA4	125 → 999,9	D - 12,2	9,5	0,9	0,5	0,25	0,6	6	1,6	≤ 0,6	≤ 0,3	≤ 0,25	≤ 0,12
PVA5	1000 → 2600	D - 19	15	1,5	0,5	0,4	0,9	11	2,6	≤ 0,9	≤ 0,5	≤ 0,4	≤ 0,2

D	d	L	ISO 3320	Reference
10	7,1	2,4	•	17PVA 000100-T40S
12	9,1	2,4	•	17PVA 000120-T40S
14	9,5	3,6	•	17PVA 100140-T40S
16	11,5	3,6	•	17PVA 100160-T40S
20	15,5	3,6	•	17PVA 100200-T40S
25	18,8	4,8	•	17PVA 200250-T40S
32	25,8	4,8	•	17PVA 200320-T40S
35	28,8	4,8	•	17PVA 200350-T40S
40	33,8	4,8	•	17PVA 200400-T40S
45	38,8	4,8	•	17PVA 200450-T40S
50	40,6	7,1	•	17PVA 300500-T40S
60	50,6	7,1	•	17PVA 300600-T40S
63	53,6	7,1	•	17PVA 300630-T40S
70	60,6	7,1	•	17PVA 300700-T40S
80	70,6	7,1	•	17PVA 300800-T40S
100	90,6	7,1	•	17PVA 301000-T40S
125	112,8	9,5	•	17PVA 401250-T40S
160	147,8	9,5	•	17PVA 401600-T40S
200	187,8	9,5	•	17PVA 402000-T40S