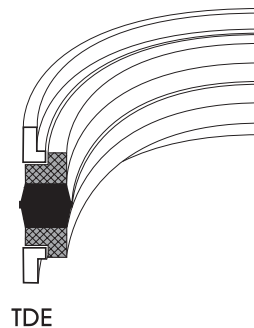


## Piston Seals (Double Acting)

TDE

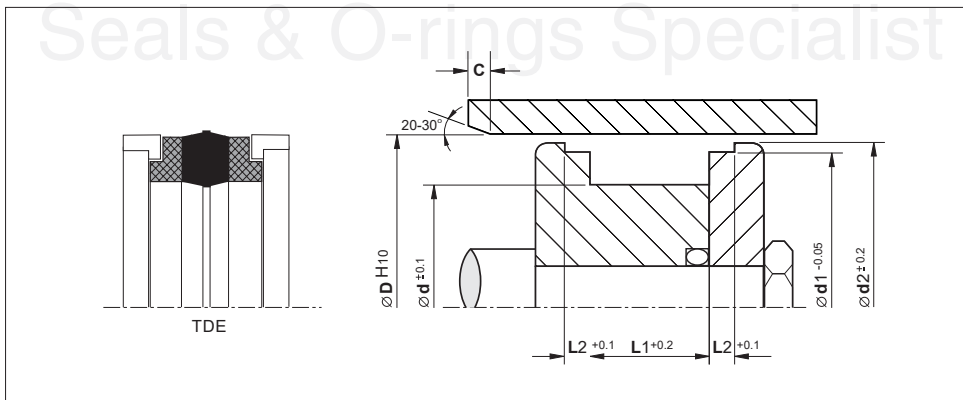
(Metric Size)



Material	Pressure (Bar)	Temp. (°c)	Speed (m/s)
NBR-Polyester-POM	450	-30 +120	0.5

- Designed for heavy hydraulic applications.
- Excellent sealing effect and abrasion resistance.
- Suitable for holding cylinder.
- Two pieces piston.

### Installation Recommendation



#### Surface roughness

Sliding surface  
Surface of housing  
Sides of housing

Ra

≤ 0.3 μm  
≤ 1.8 μm  
≤ 3.0 μm

Rt

≤ 4 μm  
≤ 10 μm  
≤ 16 μm

#### Chamfers

D	C
< 60	4.0
60-120	5.0
120-180	6.5
180-280	7.5

# Compact Seal



(Metric Size)

Bore Dia.	Groove Dimensions					Reference	Reference
	D	d	L1	L2	d1		
25.00	12.00	12.40	6.35	21.45	23.75	TDE 098-047/D	
30.00	17.00	15.40	6.35	26.50	29.00	TDE 118-066	
32.00	19.00	15.40	6.35	28.40	30.90	TDE 125-075/D	
35.00	22.00	15.40	6.35	31.40	33.70	TDE 137-086	
40.00	24.00	18.40	6.35	35.40	38.70	TDE 157-094	
40.00	25.00	24.00	6.00	34.85	39.00	DPW 157-098/1L	H58-0472850
45.00	29.00	18.40	6.35	40.40	43.70	TDE 177-114	
50.00	30.00	25.40	6.35	44.30	48.30	TDE 196-118	
50.00	34.00	18.40	6.35	45.40	48.70	TDE 196-133	
50.00	35.00	24.00	6.00	44.85	48.50	DPW 196-137/1L	H58-0474650
55.00	39.00	18.40	6.35	50.40	53.70	TDE 216-153	
55.00	40.00	24.00	6.00	49.85	53.50	DPW 216-157/L	H58-0475050
60.00	40.00	31.00	7.00	53.85	58.50	DPW 236-157/1L	H58-0282050
60.00	44.00	18.40	6.35	55.40	58.70	TDE 236-173	
60.00	44.00	20.40	6.35	55.40	58.70	TDE 236-173/D	
63.00	43.00	31.00	7.00	56.85	61.50	DPW 248-169/L	H58-0646750
63.00	47.00	19.40	6.35	58.40	61.70	TDE 248-185	
63.00	48.00	24.00	6.00	57.85	61.50	DPW 248-188/L	H58-0205250
65.00	50.00	18.40	6.35	60.40	63.70	TDE 255-196	
65.00	50.00	24.00	6.00	59.85	63.50		H58-0383850
70.00	50.00	22.40	6.35	64.20	68.30	TDE 275-196	
70.00	50.00	25.40	6.35	64.20	68.30	TDE 275-196/D	
70.00	50.00	31.00	7.00	63.85	68.00	DPW 275-196/2L	H58-0294650
75.00	55.00	22.40	6.35	69.20	73.30	TDE 295-216	
75.00	55.00	25.40	6.35	69.20	73.30	TDE 295-216/D	
75.00	55.00	31.00	7.00	68.85	73.00		H58-0818650
75.00	56.00	24.40	6.35	69.20	73.30	TDE 295-220	
80.00	60.00	22.40	6.35	74.20	78.30	TDE 314-236	
80.00	60.00	25.40	6.35	74.20	78.40	TDE 314-236/D	
80.00	60.00	31.00	7.00	73.85	78.00	DPW 314-236/2L	H58-0294950
83.00	63.00	22.40	6.35	76.20	81.30	TDE 326-248	
85.00	65.00	22.40	6.35	79.20	83.30	TDE 334-255	
85.00	65.00	31.00	7.00	78.85	83.00		H58-0388650
90.00	70.00	22.40	6.35	84.20	88.30	TDE 354-275	
90.00	70.00	25.40	6.35	84.20	88.30	TDE 354-275/D	
90.00	70.00	31.00	7.00	83.85	88.00	DPW 354-275/1L	H58-0296050
95.00	75.00	22.40	6.35	89.20	93.30	TDE 374-295	
95.00	75.00	31.00	7.00	88.85	93.00		H58-0412750
100.00	75.00	22.00	6.45	93.24	98.00	TDE 393-295	H58-0034950
100.00	75.00	26.00	9.50	93.85	98.00		H58-0891650

\* For order processing, the computer code will be  
 e.g. CS 025-012-12.4/6.35 TDE, CS 040-025-24/6 H58

(Metric Size)

Bore Dia.	Groove Dimensions					Reference	Reference
	D	d	L1	L2	d1		
100.00	80.00	25.40	6.35	94.20	98.30	TDE 393-314	
100.00	80.00	31.00	7.00	93.85	98.00	DPW 393-314/L	H58-0295150
105.00	80.00	22.40	6.35	98.10	103.00	TDE 413-314	
105.00	80.00	38.00	9.50	98.85	103.00		H58-0413150
110.00	85.00	22.00	6.45	103.50	108.00	TDE 433-334/1	H58-1188250
110.00	85.00	25.00	6.45	103.50	108.00	TDE 433-334	H58-0820650
110.00	85.00	45.00	12.80	101.85	108.00		H58-2181350
110.00	90.00	25.40	6.35	104.10	108.30	TDE 433-354	
110.00	90.00	31.00	7.00	103.85	108.00	DPW 433-354/L	H58-0712450
115.00	90.00	22.40	6.35	108.10	113.00	TDE 452-354	
115.00	95.00	31.00	7.00	108.85	113.00		H58-0796450
120.00	95.00	22.40	6.35	113.10	118.00	TDE 472-374	
120.00	100.00	25.40	6.35	114.10	118.30	TDE 472-393	
120.00	100.00	31.00	7.00	113.85	118.00	DPW 472-393/L	H58-0296150
125.00	100.00	25.00	6.45	118.50	123.00	TDE 492-393	H58-1007450
125.00	100.00	32.40	6.35	118.10	123.00	TDE 492-393/1	
125.00	100.00	38.00	9.50	118.85	123.00	DPW 492-393/2L	H58-0418650
125.00	105.00	25.40	6.35	119.10	123.30	TDE 492-413	
130.00	104.00	38.00	9.50	123.85	128.00		H58-0244350
130.00	105.00	25.00	6.45	123.50	128.00	TDE 511-413	H58-0044850
135.00	110.00	25.40	6.35	128.10	133.00	TDE 531-433	
135.00	110.00	38.00	9.50	128.35	133.00		H58-0304350
140.00	115.00	25.00	6.45	133.50	138.00	TDE 551-452	H58-1008450
140.00	120.00	25.40	6.35	134.10	138.30	TDE 551-472	
140.00	120.00	31.00	7.00	133.85	138.00	DPW 551-472/L	H58-0250550
145.00	120.00	25.40	6.35	138.30	143.00	TDE 570-472	
145.00	125.00	31.00	7.00	138.85	143.00		H58-0640150
150.00	120.00	38.40	6.35	143.00	148.00	TDE 590-472	
150.00	120.00	44.00	9.50	143.85	148.00		H58-1289550
150.00	125.00	25.40	6.35	143.00	148.00	TDE 590-492	
150.00	125.00	38.00	6.35	143.50	148.00	DPW 590-492/1L	
155.00	130.00	25.40	6.35	148.00	153.00	TDE 610-511	
160.00	130.00	25.00	6.45	153.50	158.00	TDE 629-511	H58-1008250
160.00	135.00	38.00	9.50	153.85	158.00		H58-0080450
160.00	140.00	31.00	7.00	153.85	158.00	DPW 629-551/L	H58-0304650
170.00	140.00	25.40	6.35	163.00	168.00	TDE 669-551	
170.00	140.00	31.00	7.00	162.54	168.00		H58-1222250
170.00	150.00	31.00	7.00	163.85	168.00		H58-0303350
180.00	150.00	35.00	6.45	173.00	178.00	TDE 708-590	H58-0679850
180.00	160.00	31.00	7.00	173.85	178.00		H58-1283150

\* For order processing, the computer code will be  
e.g. CS 025-012-12.4/6.35 TDE, CS 040-025-24/6 H58

# Compact Seal

(Metric Size)

Bore Dia.	Groove Dimensions					Reference	Reference	
	D	d	L1	L2	d1			d2
180.00	160.00	31.40	6.35	173.00	178.00	TDE 708-629	H58-0838450	
190.00	160.00	35.40	6.35	183.00	188.00	TDE 748-629		
190.00	160.00	44.00	9.50	183.85	188.00			
200.00	170.00	35.40	6.35	193.00	198.00	TDE 787-669		
200.00	170.00	44.00	12.00	193.85	198.00			
200.00	175.00	38.00	9.50	193.85	198.00	TDE 826-708 TDE 866-748	H58-0838850	
210.00	180.00	31.70	6.45	203.13	208.00			H58-1198450
210.00	180.00	32.40	6.35	202.70	208.00			
220.00	190.00	35.40	6.35	212.70	218.00			
220.00	200.00	31.00	7.00	213.85	218.00			H58-1056450
250.00	220.00	35.40	6.35	242.90	248.00	TDE 984-866	H58-1056350 H58-1055550	
250.00	220.00	44.00	12.00	243.85	248.00			
280.00	250.00	44.00	12.00	273.85	278.00			

\* For order processing, the computer code will be  
e.g. CS 025-012-12.4/6.35 TDE, CS 040-025-24/6 H58