

Description

Cartridge unit
For top entry drives, type S184 to DIN
Independent of direction of rotation
Liquid-lubricated
Multiple springs rotating
Single or double seals
Unbalanced

Technical Features

Available with or without floating bearing
Double seals can be applied at higher pressure
Ready-to-fit and factory-tested units
Suitable for standardizations

Typical Industrial Applications

Agitators Chemical industry
Non-toxic media with single seal
Pharmaceutical industry Reactors
Toxic media with double seal

Performance Capabilities

DIN 28138 T2
Sizes: d3 = Upto 220 mm (Upto 8.625'')
Single seals:
Pressure: p1 = vacuum ... 6 bar (87 PSI),
p3 = pressureless
Temperature: t1* = -40 °C ... +150 (250) °C
(-40 °F ... +302 (482) °F)
Double seals:
Pressure: p1 = vacuum ... 16 bar (232 PSI),
p3 = max. 18 bar (261 PSI)
Temperature: t1* = -40 °C ... +200 (350) °C
(-40 °F ... +392 (662) °F)
Speed = 0 ... 5 m/s (0 ... 16 ft/s)

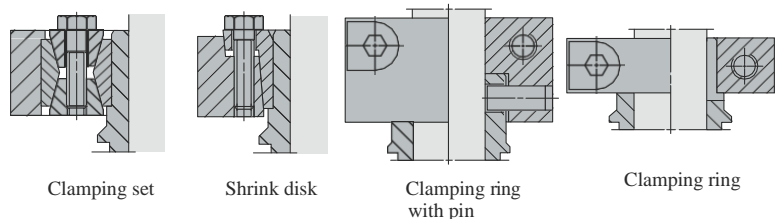
Standards

FDA
DIN 28136 T2 (for steel vessels)
DIN 28141 (flange connection for steel vessels)
DIN 28154 (shaft end for steel vessels)

Notes

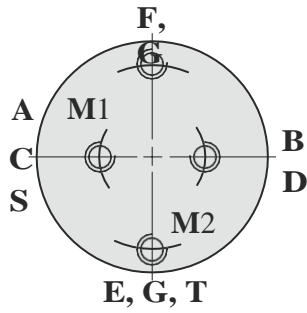
Options:
Cooling or heating flange
Leakage drain, flush or heating flange
Leakage drain or flush
Polymerization barrier, leakage drain or flush

Torque Transmissions



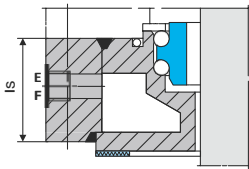
Installation, Details, Options

Designation and position acc. to DIN 28138 T3.

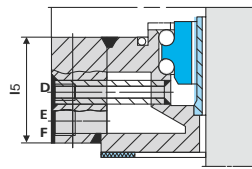


Supply Connections	
A	Barrier fluid resp. quench IN
B	Barrier fluid resp. quench OUT
C	Drainage
D	Leakage drain G1/8"
E	Cooling IN G3/8"
F	Cooling OUT G3/8"
G	Grease
S	Flush
T	Temperature metering

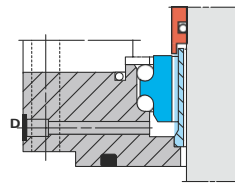
For reasons of standardization, the supply connections of single seals are matched to those of the double seals (in deviation from DIN 28138 T3).



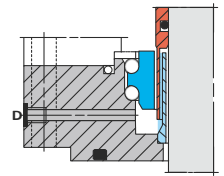
Option Cooling flange, can be used alternatively as a heating flange (tmax. = 3500C (6620F)).



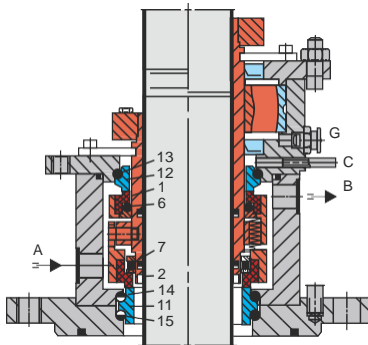
Option Leakage drain, can be used alternatively as a flush or as a heating flange.



Option Leakage drain, can be used alternatively as a flush.



Option Polymerization barrier, can be used alternatively as a leakage drain or a flush.



S154

All types of the S184range available for unstepped shafts (all diameters). Seal identification: S154... Customized design or e.g. different drives (torque transmissions) are available.

Design Variations

Single Seals Variants

S184K

Single seal

S184KL

Single seal with integrated floating bearing. Operation of single seals only with pressure less quench.

Double Seals Variants

S184K-D

Double seal

S184KL-D

Double seal with integrated floating bearing. These seals are designed to be self-closing on the product side, i.e. they will remain closed even with pressure variations or a pressure reversal. Operation is optionally the same as for the single version (pmax = 6 bar (87 PSI) or Δpmax = 6 bar at p1 > p3). In view of the mechanical seal on the atmosphere side it can be used as a buffer pressurized double seal (p1 = 16 bar (232 PSI)).

Dimensional Data

Dimensions in millimeter

d ₃ ¹⁾	d ₇ ¹⁾	d ₁	n x d ₂	d ₄	d ₆	k	L ₁	L ₂	L _w ²⁾	l ₁	l ₂	A	M ₁	M ₁	A, B
40	38	175	4X18	110	90	145	87	136	143	15	28	122	M12	M16	G3/8
50	48	240	8X18	176	135	210	89	149	148	17	28	157	M12	M16	G3/8
60	58	240	8X18	176	135	210	93.5	156	158	17	28	168	M12	M16	G3/8
80	78	275	8X22	204	155	240	104.5	189	168	20	34	203	M16	M20	G1/2
100	98	305	8X22	234	190	270	109	190	178	20	34	228	M16	M20	G1/2
125	120	330	8X22	260	215	295	110	205	203	20	40	268	M20	M20	G1/2
140	135	395	12X22	313	250	350	124	222	208	20	40	285	M20	M20	G1/2
160	150	395	12X22	313	265	350	127.5	219.5	213	25	40	297	M20	M20	G1/2
180	170	445	12X22	364	310	400	132.5	230	233	25	45	332	M24	M20	G1/2
200	190	445	12X22	364	310	400	137.5	237.5	243	25	45	352	M24	M20	G1/2
220	210	505	16X22	422	340	460	149.5	249.5	263	25	50	381	M24	M20	G1/2

1) Shaft diameters d3 and d7 to DIN 28154

2) Shaft step to DIN 28154

inch size available from size 1.500 to 8.625

Note: Additional technical & dimensional information will be provided on request.