

## Chemical seal type W Fully welded (monoblock)

Chemical seal is used to prevent the measured medium from entering the measuring mechanism of the pressure gauge. It is used when measuring the pressure of solidifying, crystallising or hot liquids or where it is necessary to ensure that the system can be cleaned from product residues.

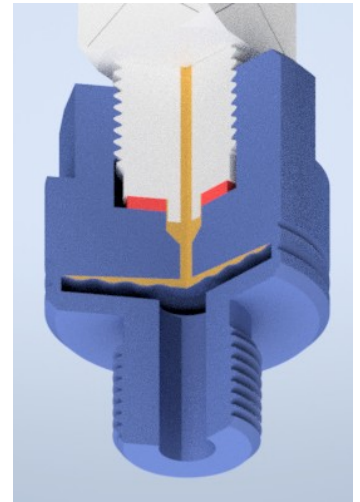
Type W is made as a non-detachable weldment. If a nozzle is included between the chemical seal and the pressure gauge during assembly, a high effect in damping pressure surges is obtained. The damping effect is almost independent of temperature and the nozzle can never become clogged.

### Material:

- Diaphragm: stainless steel SS 316L / 1.4435 (other on request)
- Body: stainless steel SS 316L / 1.4404

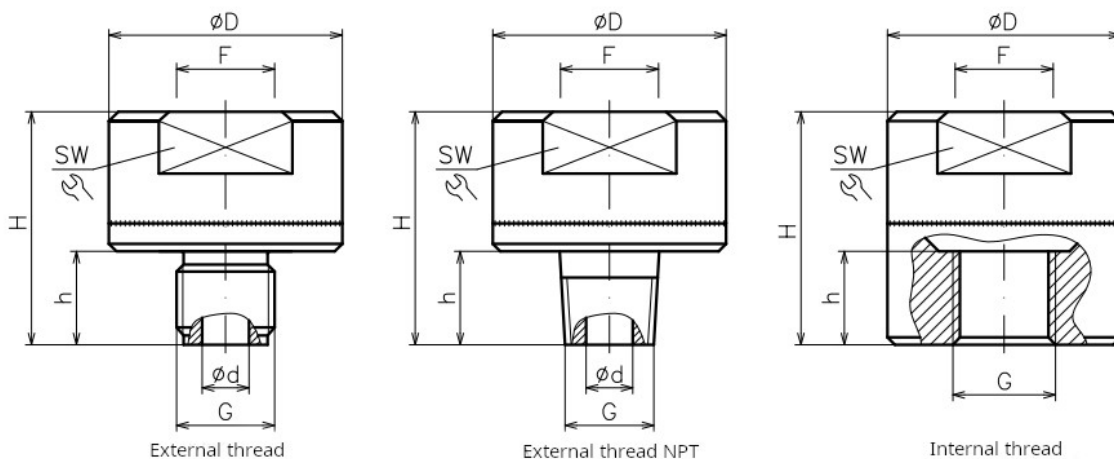
### Pracovní teplota:

- Medium: -20 ... +100 °C (direct connection)
- Medium up to 400°C (when connected with a heat sink)
- Ambient: -20 ... +60°C
- other conditions on request



**Chemical seal types** - different types of G and F threads can be combined.

BHV	PN	F	G		D	SW
type	[bar]		external (through hole $\varnothing d$ )	Internal hole	[mm]	[mm]
<b>W32</b>	250	G 1/2"	G 1/2" (through hole 8 mm)		$\varnothing 32$	SW 27
<b>W40</b>	160	G 1/4" G 1/2"	G 1/4" (through hole 6 mm) G 3/8" (through hole 8 mm) G 1/2" (through hole 10 mm) M20x1.5 (through hole 10 mm) 1/4" NPT (through hole 6 mm) 1/2" NPT (through hole 10 mm)	G 1/4" G 3/8" G 1/2" M20x1,5 1/4" NPT 1/2" NPT	$\varnothing 40$	SW 32
<b>W50</b>	40	G 1/4" G 1/2"	G 1/2" (through hole 10 mm) G 3/8" (through hole 8 mm) M20x1.5 (through hole 10 mm) 1/2" NPT (through hole 10 mm)	G 1/4" G 3/8" G 1/2" M20x1,5 1/4" NPT 1/2" NPT	$\varnothing 50$	SW 41



**Height of the chemical seal H [mm]:**

G - External thread	h [mm]	F (G1/4")	F (G1/2")
G1/4", 1/4" NPT	12	H = h + 27	H = h + 30
G3/8"	16		
G1/2", M20x1,5, 1/2" NPT	20		
G - Internal thread	h [mm]	F (G1/4")	F (G1/4")
G1/4", 1/4" NPT	12	H = h + 23	H = h + 26
G3/8"	16		
G1/2", M20x1,5, 1/2" NPT	20		

**Minimum recommended pressure gauge range:**

Type of chemical seal	Nominal gauge size	
	DN 63	DN100
W40	1,0 bar	2,5 bar
W50	1,0 bar	1,0 bar

**Special designs**

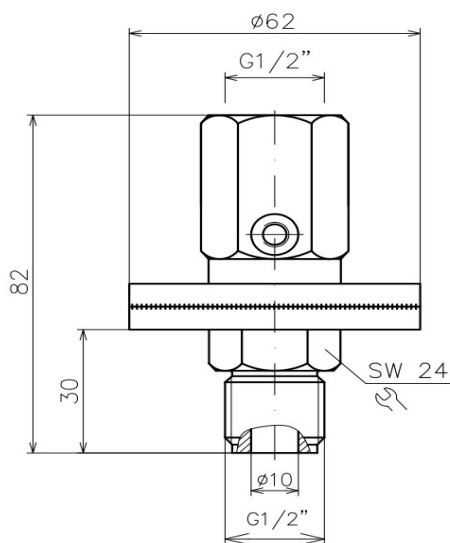
**Typ W40 / PN 400**  
(threads on request)



**Typ W60 / PN 40 with conical shape**  
(threads on request)



**Typ W62 / PN 40**  
(with threads G1/2" - other on request)



**Assembly with measuring instrument:**

The most common assembly of the chemical seal is with a manometer or transmitter by direct connection (F-thread), it can be adapted for a variant with an extended neck, cooler or capillary line.