# Homogeniser Connections

## Specification
## Type HM

### Application
Benney offers homogeniser diaphragm seals to suit most brands of Homogeniser Pumps (Piston Pumps). Benney Homogeniser Seals have been specifically designed to withstand the pressure spikes typical of a high-pressure Piston Pump. A dampening device has been incorporated into the Seal to protect both the instrument and the Diaphragm from premature failure. Although the Seal can be supplied without the dampening device this is not recommended. It is strongly recommended that the assembly be completed in our laboratory due to the complexity of the Seal, Dampening device and Fill Process. The seal can be supplied with either a clamping block, 1-1/4" retaining nut or screwed connections.

### Configuration
Gauge pressure only. DP type transmitters must be supplied with suitable housings to withstand the pressure and reduce the fill quantities therefore reduce errors induced by ambient temperature change. Gauge pressure transmitters require a G1/2" Process Connection.
Specialised homogeniser seals fitted either direct to the Pressure Instrument or via Capillary.

### Process Connection
APV Style with clamp block.
APV Style with 1¼'' BSPP nut.
Niro Style.
Alfa/Rannie Style.
Alfa Laval with 1-1/4'' BSPP nut.
3/4'' BSPT plug.
Tetra Pak Style.

### Seal Construction
Machined out of bar stock with diaphragm welded directly into seal body.

### Diaphragm Materials
316L stainless steel (standard)
Other materials available upon request.

### Body and Weldment Material
316/316L Dual Certified Stainless Steel (standard)
Other materials available upon request.

**Active Diaphragm** = 22mm diameter.

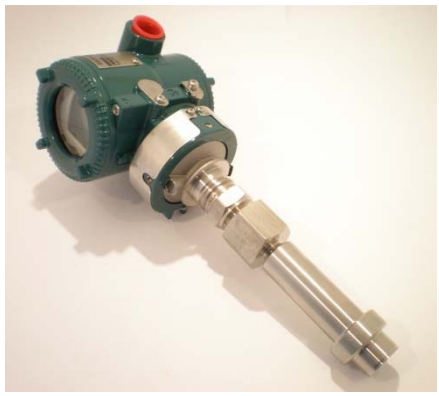
### Maximum Pressure
The maximum working pressure for this seal is as per the rating of associated machine's pipe-work and fittings.

### Capillary
Available in 1 to 10 metre lengths. Capillaries must be of matching lengths for differential systems.

### Capillary Armour
Spiral wound 304 Stainless Steel (standard)

### Zero Stability
Stability will be affected by the instrument configuration, ambient temperature, process temperature, connection size (diaphragm size) and the measuring range.
Please contact to discuss temperature effects and instrument accuracy.

### Dimensional Drawings & System Configuration
Refer to Dimensional Drawings.



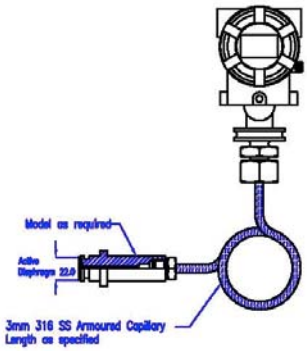
# General Specifications

| | Homogeniser Connection – Type HM | Suffix Code |
|---|---|---|
| **Process Connection** | Homogeniser Measurement | HM |
| **Connection Style** | APV | A |
| | NIRO | B |
| | ALFA/Rannie | C |
| | TETRA PAK | D |
| | 3/4” BSPP Plug Seal | E |
| | 1-1/4” BSPP Female Nut including washer on an APV Style Seal | F |
| | Special | X |
| **Wetted Material** | 316/316L Dual Certified Stainless Steel | S |
| | Special | X |
| **System Configuration** | Gauge Pressure System with G-1/2” Connection Direct Mounted TX | G |
| | Gauge Pressure System with G-1/2” Connection Capillary mounted TX | S |
| | Gauge pressure System with DP Type TX Capillary Mounted | P |
| | | |
| **Capillary / Standoff** | Standoff (System Configuration “M”) / Heat Neck (System Configuration “G”) | AA |
| | None Note: Only available with System Configuration “G” | 00 |
| | 1 Metre | 01 |
| | 2 Metres | 02 |
| | 3 Metres | 03 |
| | 4 Metres | 04 |
| | 5 Metres | 05 |
| | 6 Metres | 06 |
| | 7 Metres | 07 |
| | 8 Metres | 08 |
| | 9 Metres | 09 |
| | 10 Metres | 10 |
| **Fill Liquid** | KN22 Silicon Oil 100cs (-40°C to +290°C) | B |
| | KN59 Neobee 10.1cs (FDA app) (-20°C to +160°C for less than 0Bar. -20°C to +204°C for greater than 0Bar) | F |
| | Vegetable Oil (Food Grade) (10°C to +100°C) | V |
| | Special | X |

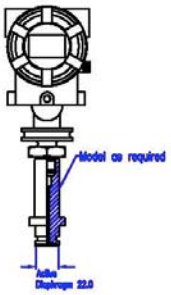
# Model HM

Homogeniser connections – Seals

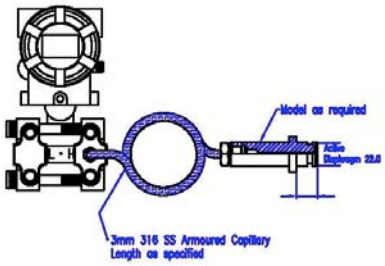
Configuration "S"



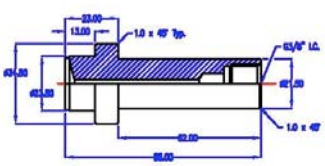

Configuration "G"



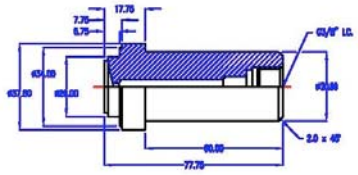

Configuration "P"



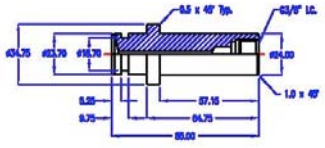

## Model selection



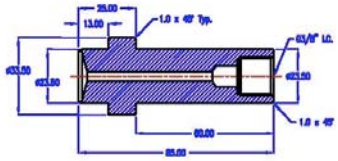
TETRA PAK



NIRO SWARVY



ALPHA LAVAL



A.P.V.