DOUBLE SEAL SYSTEMS

Sizes: ¾ to 12" (16 to 320 mm)

Daonte
Tecnología Metalmecánica

HEAT RESISTANT 450ºC

Purge pipes fast with minimal gas usage

PPM also manufactures the silicone Double Seal purging system that has been designed to further reduce both inert gas use and purging time. This system uses silicon discs to form an airtight seal, reducing purge times and gas usage for maximum efficiency.

There are 2 styles of silicon Double Seal systems available:

- the Gas Finger system is designed for small pipes and tubes from 16 - 38 mm i/d
- the Double Seal system is made for pipes from ¾ - 12" (16 - 320 mm)



Features and advantages

- Extremely short purge times resulting in valuable cost savings
- Typical purge times of less than 2 minutes (e.g. an 8" pipe will purge to below 0.01% oxygen in less than 2 minutes)
- High quality silicon sealing disks that prevent them tilting or falling over inside the pipe
- Guaranteed gas tight seal
- UV and temperature resistant up to 330ºC continuously or 450ºC for short periods
- Suitable for purging pipes, elbows and fittings
- The silicon seal units can be separated and used as a gas finger and pipe stopper respectively
- Fully interchangeable and individually exchangeable system, reducing cost of ownership



Available as a kit in 3 sizes:

DSK16-165 (16 - 165 mm i/d)

DSK16-220 (16 - 220 mm i/d)

DSK16-320 (16 - 320 mm i/d)

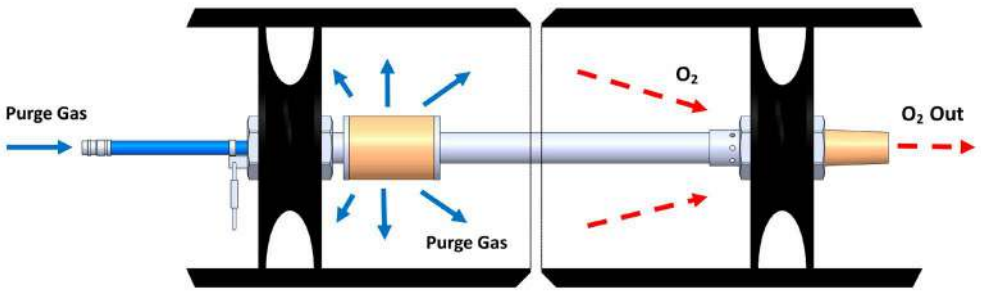
How it works

The gas inlet and outlet are provided with twin sealing discs separated by a flexible, rigid or a spring-type tube. The design guarantees that at least one disc will always remain tight to the pipe wall creating a 100% seal. The discs are UV and temperature-resistant up to 330ºC (626ºF) continuously or up to 450ºC (824ºF) for short periods. The gas is diffused into the chamber via the built-in sintered diffuser and exits through the exhaust holes in the secondary twin disc unit.

This extremely short process of gas diffusion provides an equal gas flow and prevents any gas turbulence behind the weld, thereby minimising the risk of oxygen re-entering the welding chamber.

Besides the very short purging time, the double seal system also offers the possibility to cover various nominal pipe diameters by one pair of seals enabling highly economic use of the device. The double seal system can be purchased individually or in kit form for a range of pipe diameters.





Double Seal kits sizing and specification - RECOMMENDED

PART NO	DESCRIPTION	PIPE I/D RANGE		WEIGHT (LBS. / KG)		CONNECTOR LENGTH
DSK16-165	Double Seal Kit - complete kit 16 - 165 mm i/d	0.62" - 6.49"	16 - 165 mm	24 lbs.	11.00 kg	Variable - check kit list
DSK16-220	Double Seal Kit - complete kit 16 - 220 mm i/d	0.62" - 8.66"	16 - 220 mm	33 lbs.	15.00 kg	Variable - check kit list
DSK16-320	Double Seal Kit - complete kit 16 - 320 mm i/d	0.62" - 12.59"	16 - 320 mm	42 lbs.	19.00 kg	Variable - check kit list

Double Seal Gas Fingers

PART NO	DESCRIPTION	PIPE I/D RANGE		WEIGHT (LBS. / KG)		CONNECTOR LENGTH
DSF16-19	Double Seal Gas Finger 16 - 19 mm i/d	0.62" - 0.74"	16 - 19 mm	0.5 lbs.	0.20 kg	n/a
DSF19-24	Double Seal Gas Finger 19 - 24 mm i/d	0.74" - 0.94"	19 - 24 mm	0.5 lbs.	0.20 kg	n/a
DSF24-29	Double Seal Gas Finger 24 - 29 mm i/d	0.94" - 1.14"	24 - 29 mm	0.5 lbs.	0.20 kg	n/a
DSF29-34	Double Seal Gas Finger 29 - 34 mm i/d	1.14" - 1.33"	29 - 34 mm	0.6 lbs.	0.30 kg	n/a
DSF34-38	Double Seal Gas Finger 34 - 38 mm i/d	1.33" - 1.49"	34 - 38 mm	0.6 lbs.	0.30 kg	n/a

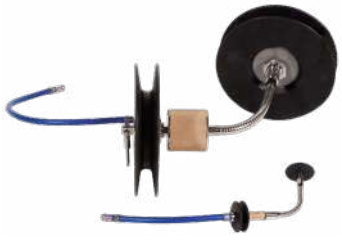
Sizing and specification

PART NO.	DESCRIPTION	PIPE I/D RANGE		WEIGHT (LBS. / KG)		CONNECTOR LENGTH
DS16-19	Double Seal purge system - Flexible 16 - 19 mm i/d	0.62" - 0.74"	16 - 19 mm	1.5 lbs.	0.65 kg	3.94" / 100 mm
DS19-24	Double Seal purge system - Flexible 19 - 24 mm i/d	0.74" - 0.94"	19 - 24 mm	1.5 lbs.	0.70 kg	3.94" / 100 mm
DS24-29	Double Seal purge system - Flexible 24 - 29 mm i/d	0.94" - 1.14"	24 - 29 mm	1.5 lbs.	0.75 kg	3.94" / 100 mm
DS29-34	Double Seal purge system - Flexible 29 - 34 mm i/d	1.14" - 1.33"	29 - 34 mm	1.5 lbs.	0.75 kg	3.94" / 100 mm
DS34-38	Double Seal purge system - Flexible 34 - 38 mm i/d	1.33" - 1.49"	34 - 38 mm	1.5 lbs.	0.80 kg	3.94" / 100 mm
DS38-43 to DS290-320 are supplied with rigid connector as standard, flexible on request						
DS38-43	Double Seal purge system - Rigid 38 - 43 mm i/d	1.49" - 1.69"	38 - 43 mm	1.5 lbs.	0.85 kg	3.94" / 100 mm
DS43-48	Double Seal purge system - Rigid 43 - 48 mm i/d	1.69" - 1.88"	43 - 48 mm	2 lbs.	0.90 kg	3.94" / 100 mm
DS47-53	Double Seal purge system - Rigid 47 - 53 mm i/d	1.85" - 2.08"	47 - 53 mm	2 lbs.	0.95 kg	3.94" / 100 mm
DS52-58	Double Seal purge system - Rigid 52 - 58 mm i/d	2.04" - 2.28"	52 - 58 mm	2 lbs.	1.00 kg	3.94" / 100 mm
DS64-72	Double Seal purge system - Rigid 64 - 72 mm i/d	2.51" - 2.83"	64 - 72 mm	2 lbs.	1.10 kg	3.94" / 100 mm
DS78-86	Double Seal purge system - Rigid 78 - 86 mm i/d	3.07" - 3.38"	78 - 86 mm	3 lbs.	1.20 kg	3.94" / 100 mm
DS90-101	Double Seal purge system - Rigid 90 - 101 mm i/d	3.54" - 3.97"	90 - 101 mm	3 lbs.	1.30 kg	3.94" / 100 mm
DS100-112	Double Seal purge system - Rigid 100 - 112 mm i/d	3.93" - 4.40"	100 - 112 mm	3 lbs.	1.40 kg	3.94" / 100 mm
DS120-130	Double Seal purge system - Rigid 120 - 130 mm i/d	4.72" - 5.11"	120 - 130 mm	3 lbs.	1.50 kg	3.94" / 100 mm
DS124-138	Double Seal purge system - Rigid 124 - 138 mm i/d	4.88" - 5.43"	124 - 138 mm	3 lbs.	1.60 kg	3.94" / 100 mm
DS144-155	Double Seal purge system - Rigid 144 - 155 mm i/d	5.66" - 6.10"	144 - 155 mm	4 lbs.	1.70 kg	3.94" / 100 mm
DS150-165	Double Seal purge system - Rigid 150 - 165 mm i/d	5.90" - 6.49"	150 - 165 mm	4 lbs.	1.80 kg	7.08" / 180 mm
DS197-206	Double Seal purge system - Rigid 197 - 206 mm i/d	7.75" - 8.11"	197 - 206 mm	4 lbs.	2.00 kg	7.08" / 180 mm
DS209-220	Double Seal purge system - Rigid 209 - 220 mm i/d	8.22" - 8.66"	209 - 220 mm	5 lbs.	2.20 kg	7.08" / 180 mm
DS246-257	Double Seal purge system - Rigid 246 - 257 mm i/d	9.68" - 10.11"	246 - 257 mm	5 lbs.	2.40 kg	7.08" / 180 mm
DS260-280	Double Seal purge system - Rigid 260 - 280 mm i/d	10.23" - 11.02"	260 - 280 mm	5 lbs.	2.60 kg	7.08" / 180 mm
DS290-320	Double Seal purge system - Rigid 290 - 320 mm i/d	11.41" - 12.59"	290 - 320 mm	6 lbs.	3.00 kg	7.08" / 180 mm



Single Gas Finger for smaller pipe and tubes





Shown with flexible hose connection for purging elbows and fittings.