



ICS Shaft Seal Arrangements

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ICS
WEAR GROUP INC

ICS Shaft Seal Arrangements



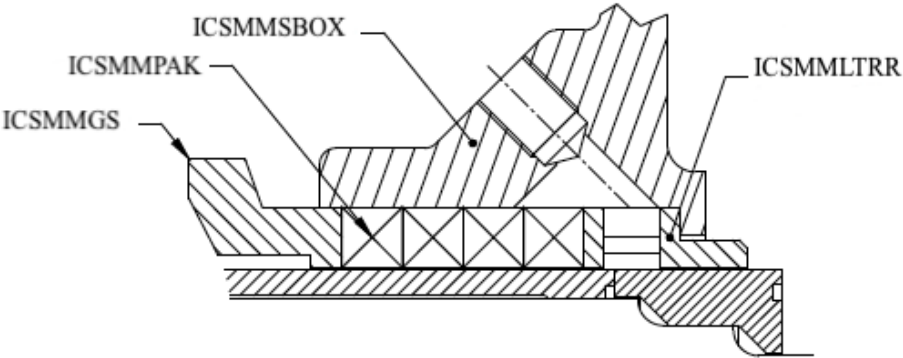
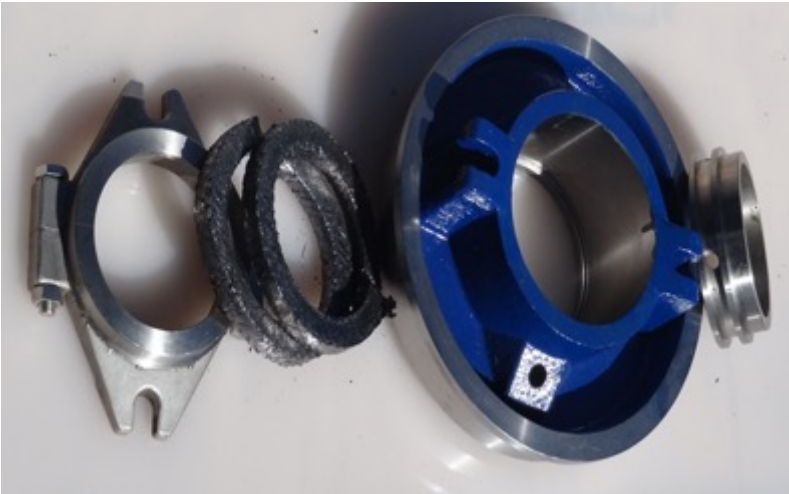
Gland flow rates indicated are suitable for new and used installations.



In doubt contact your ICS Wear Group representative.

Gland Seal – Full Flow

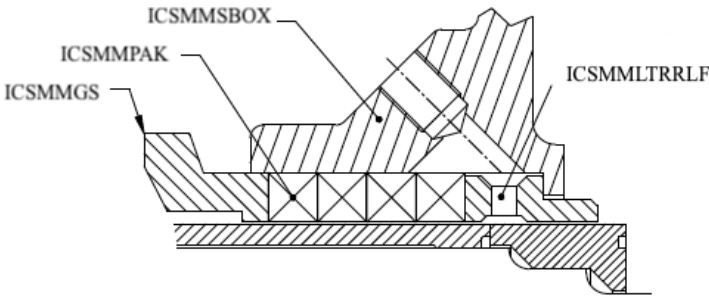
- In a full flow gland seal arrangement, a stuffing box replaces the expeller ring. A lantern restrictor and packing are used. This seal arrangement is used when the interior conditions cannot accommodate a centrifugal expeller seal arrangement. Clean water with a pressure 35 to 50 kPa above discharge pressure is required.
- Right are the gland water requirements for a Full Flow Gland:



FRAME SIZE	A	B	C, CC, CM	D, DD, DM	E, EE, EM	F, FF, FM	G, GM	H
LITRES/SEC	0.15	0.25	0.35	0.55	0.70	1.20	1.60	2.10

Gland Seal – Low Flow

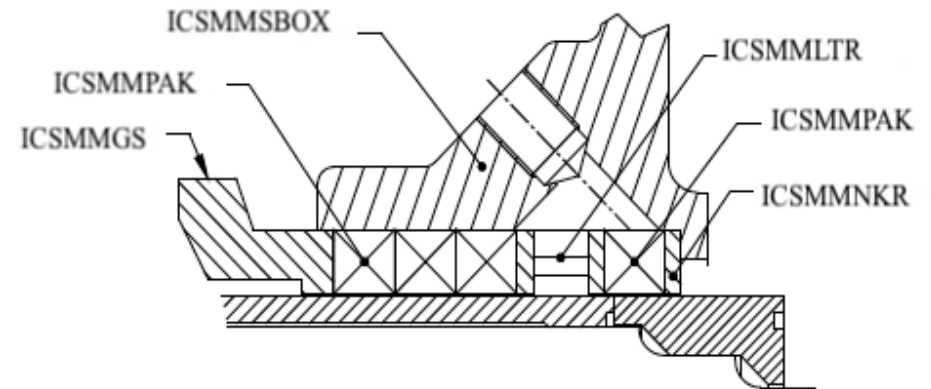
- A low flow gland seal arrangement is used when only very small quantities of gland water are allowed to dilute and mix with the fluid being pumped. Clean water with a pressure 35 to 50 kPa above discharge pressure is required.
- Right are the gland water requirements for a Low Flow Gland:



FRAME SIZE	A	B	C, CC, CM	D, DD, DM	E, EE, EM	F, FF, FM	G, GM	H
LITRES/SEC	0.06	0.09	0.11	0.15	0.20	0.26	0.40	0.60

Gland Seal – Ultra Low Flow

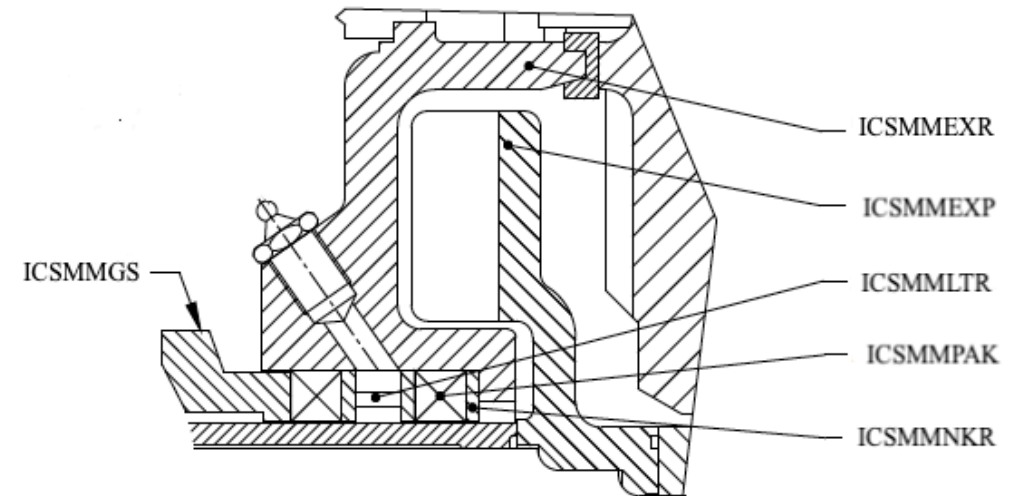
- An ultra low flow gland seal arrangement is used when adding additional water to the product is undesirable. Clean water with a pressure 35 to 50 kPa above discharge pressure is required. This seal arrangement is not suitable or recommended for high pressure pump applications.
- Right are the gland water requirements for an Ultra Low Flow Gland:

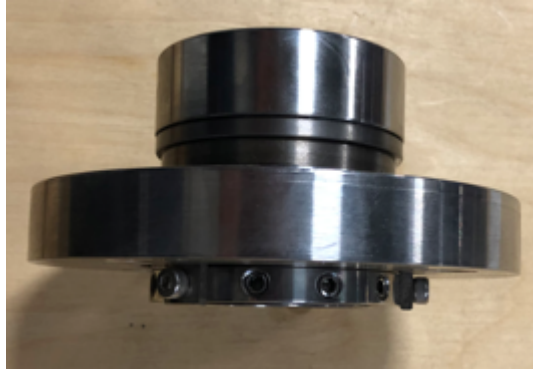
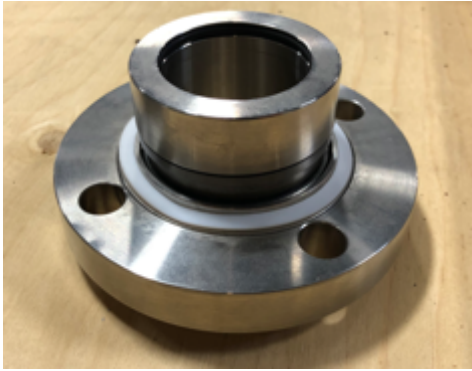


FRAME SIZE	A	B	C, CC, CM	D, DD, DM	E, EE, EM	F, FF, FM	G, GM	H
LITRES/SEC	0.02	0.03	0.04	0.05	0.06	0.09	0.14	0.20

Centrifugal Seal

- A metal centrifugal seal provides the major advantage that no gland water is required, making it suitable for most slurry pumping applications. A leak-proof system is achieved with the expeller ring working with the back of the impeller. Grease packed gland with a neck ring and lantern ring prevents leakage with a stationary pump. Under normal operating conditions, this seal arrangement is leak proof.
- This sealing system is available in rubber, when the expeller and expeller ring are made from molded rubber.





Mechanical Seal's

Mechanical Seals come in various styles the most common are the double and single cartridge mechanical seal as you can see to the right.

Photos above are of a single cartridge mechanical seal.

Mechanicals Seals are available for ICS Mill Master Pumps, They can be fitted upon client request

