

A TYPE – DIAPHRAGM

A Type Diaphragm

Diaphragm	Composition	Size	Temperature
425	EPM (Ethylene Propylene)	All Sizes	-40°C to 130°C
300	Butyl (Isobutylene Isoprene)	All Sizes	-40°C to 130°C
237	CSM (Chlorosulfonated Polyethylene)	All Sizes	-10°C to 100°C
XA	EPDM (Ethylene Propylene Diene)	All Sizes	-40°C to 130°C
HT	Neoprene (Polychloroprene)	All Sizes	-30°C to 100°C
226	FKM (Fluoroelastomer)	All Sizes	-5°C to 150°C
C	Nitrile (Butadiene Acrylonitrile)	All Sizes	-20°C to 100°C
Q	Natural Rubber	All Sizes	-50°C to 100°C

214/300	PTFE/Butyl	DN8-DN250	-20°C to 150°C
214/425	PTFE/EPM	DN8-DN250	-20°C to 160°C
214/226	PTFE/FKM	DN8-DN250	-5°C to 175°C
214S/425	TFM/EPM	DN8-DN150	-20°C to 160°C
214K/425	PTFE/PVDF/EPM	DN15-DN150	-20°C to 100°C

In the range of PTFE diaphragms, Saunders offers both moulded open and closed options for your convenience. The 214S is available as moulded closed and was designed specifically to reduce polymeric creep, therefore increasing the sealing properties and life of the diaphragm.



Moulded closed



Moulded open

PTFE Diaphragm

214/300 - Used in strong acids and alkalis, and salts in water at high temperature. Sulfuric acid is a good example with temperatures up to 110°C and concentrations up to 96 %.

214/425 - Typical applications are strong acids, alkalis and salts in water at high temperature. Constant steam is also another important application.

214/226 - Strong acid, diluted chlorine, bromine solutions at low concentration.

214S/425 - Strong acids, alkalis and salts in water at high temperature. Constant steam applications where the valve is mainly closed (diaphragm is moulded closed).

214K/425 - Three layer diaphragm with PTFE/PVDF/425, the best option for chlorine, bromine gas and chlorinated solutions.

Rubber Diaphragm

425 - Salts in water, acids and alkalis, ozone, water, intermittent steam. Great solution for food and beverages applications. FDA and USP approved¹.

300 - Chemicals, diluted acids and alkalis, drinking water. Additional abrasive applications like phosphoric acid in low concentrations. FDA, USP and WRAS approved¹.

237 - The best solution for sodium hypochlorite. Great with strong acids and low concentration chlorine gas. It is also oil resistant.

XA - Specifically designed for both abrasive and corrosive applications such as phosphoric acid, metal treatment, mining applications.

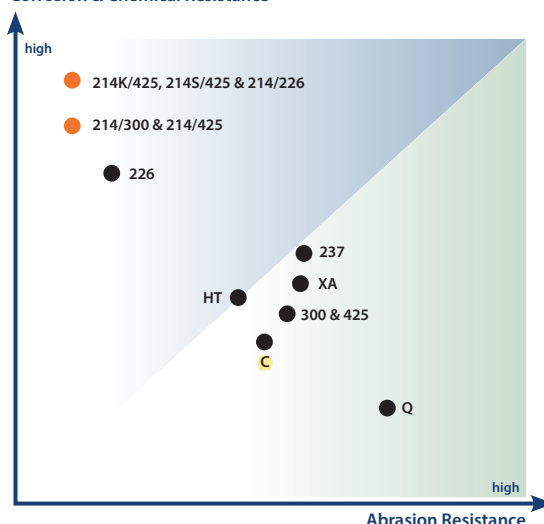
HT - Suitable for abrasive slurries containing hydrocarbons.

226 - Great solution for hydrogen at high temperature, concentrated acids, aromatic solvents, low concentrated chlorine solutions, ozone, unleaded petroleum.

C - Lubricating oil, cutting oils, paraffin, animal vegetable oils, aviation kerosene at low temperatures. Cv is ideal for vacuum applications, where oils are present, e.g. (compressed air, acetylene gas, LPG).

Q - Salts in water, diluted acids and alkalis, and abrasive applications.

Corrosion & Chemical Resistance



¹ FDA - Food and Drug Administration

USP - United States Pharmacopeia

WRAS - Water Regulations Advisory Scheme

All rubber diaphragms have threaded brass fixings, except vacuum diaphragm (Cv, 300v, 425v), which have steel fitments. PTFE diaphragms have a stainless steel bayonet fitments.