

Saunders KB Type Diaphragm Valves

Materials of Construction

Valve bodies

CAST IRON, GUNMETAL
Screwed DN15 – DN50

CAST IRON, GUNMETAL
Flanged DN15 – DN350*

* Contact us for materials range

Rubber lined body data

- ◆ Soft rubber linings
 - Natural (Polyisoprene), 40–46° IRHD
 - Polychloroprene, 72–78° IRHD
 - Butyl (Isobutylene isoprene), 60–66° IRHD
- ◆ Hard ebonite rubber HRL, 75–85° Shore D
- ◆ Lining thickness range 2–4.5mm (DN20–DN350)

Valve body lining – production tests

All Saunders lined valves have each body individually tested for lining integrity.

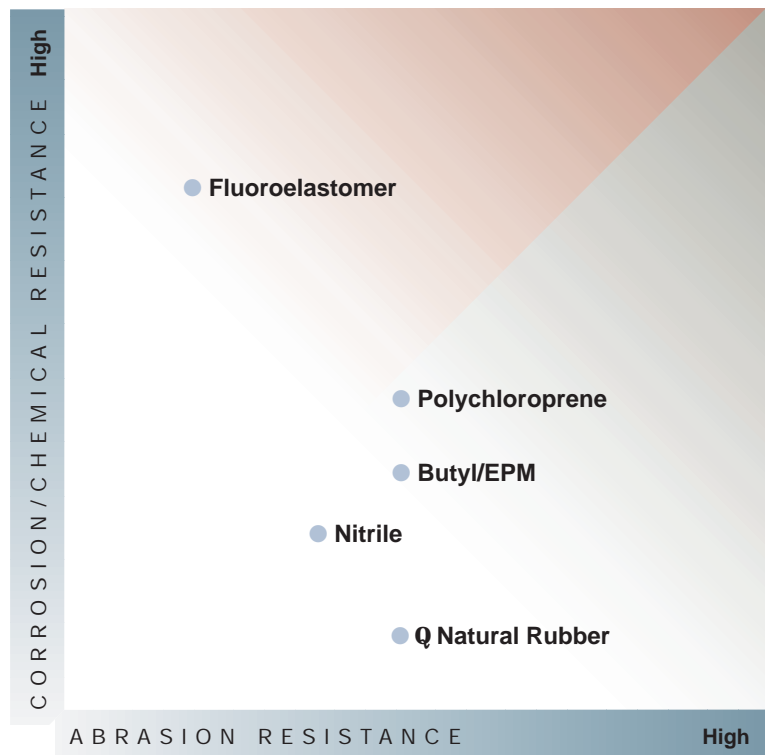
- ◆ Glass lining – Spark test 10kV ac
- ◆ Rubber, Butyl, Polychloroprene, Natural – Spark test 14kV ac/dc
- ◆ Rubber, HRL – Spark test 17kV ac/dc

Material	Grade
Fluoroelastomer	226
Polychloroprene	HT
Nitrile	C
Butyl	300
EPM	425
Natural Rubber	AA

Diaphragm Materials

Grades	Elastomer Type	General Service & Approvals
AA	Natural rubber (polyisoprene) metal oxide pigmented – brown sulphur cured, black reinforced	Abrasives in slurry or dry powder form
C	Butadiene Acrylonitrile, (Nitrile) sulphur cured, black reinforced	Lubricating oil, cutting oils, paraffin, animal and vegetable oils, aviation kerosene
HT	Polychloroprene, sulphur cured, black reinforced	Abrasives slurries containing hydrocarbons
226	Fluoroelastomer, amine cured, black reinforced	Concentrated acids, aromatic solvents, chlorinated solvents, unleaded petroleum
300	Isobutylene Isoprene, resin cured black reinforced	Abrasive slurries, acid digested slurries, alkalis, dry powders
425	Ethylene propylene (EPM) organic peroxide cured, black reinforced	Abrasive slurries, acid digested slurries, alkalis, dry powders

Diaphragm Materials – Visual Process Resistance Guide



Size DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
Non-rising handwheel												3.5	3.5	3.5	1.5
Rising Handwheel	10	10	10	10	10	10	10	10	10	6	6				

Maximum working pressure for KB valves shown is for manual valves, defined as the maximum line pressure against which valves may be operated to closed position up to and including 55°C. For ES actuators, please refer to appropriate actuator performance selection technical data sheets.