Kerala Paper Products Limited

(Government of Kerala Undertaking)

NEWSPRINTNAGAR PO,
KOTTAYAM.
KERALA – 686 616. INDIA.
www.keralapaper.in
CIN: U21013KL1983GOI003735

INVITATION TO TENDER

29.01.2026

To
……
……

Inquiry No. : KPPL/CP/INST/2716
Due Date: 04.02.2026
Email ID: commercial@kpplonline.in

Dear Sirs,

We invite you to submit your quotation for the following goods by e-mail in PDF format indicating our Inquiry No. and due date to commercial@kpplonline.in before due date.ie on 04.02.2026.

S.N	Description	Unit	Qty
1	ROLLER DIAPHRAGM BFA 50/55-15 Long Stroke Rolling Diaphragm Roller Diaphragm BFA 55x50x15 (D:55 x C:50 x H:15) MATERIAL : 50 NBR 253, Dimensions: DC-55MM, DK-50MM, H-15MM, W-0.45MM Item No. 2414 MAKE FREUDENBERG GERMANY	NO	10

Terms of Delivery: Free Delivery at our KPPL Store.
Terms of Payment: Within 30 days after receipt subject to acceptance.
Delivery required in case of placement of an Order based on this enquiry: **Immediate**

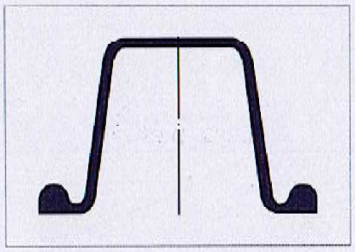
Your offer should be specific with following break-up;-

1. Basis of price
2. Basic Price
3. Excise Duty %
4. GST
5. Discount offered %
6. Other charges%(Like P&F, Freight etc)
7. Delivery Time: Immediate

Yours faithfully
For Kerala Paper Products Ltd

AUTHORISED SIGNATORY

LONG-STROKE ROLLING DIAPHRAGMS BFA



Long-Stroke Rolling Diaphragms BFA

PRODUCT DESCRIPTION

Long-stroke rolling diaphragms are thin-walled, special sensitive diaphragms made from highly elastic materials with fabric reinforcement.
Along with this standard design type BFA, the long-stroke rolling diaphragms can also be supplied made in special tools without fabric, type BFAO

PRODUCT ADVANTAGES

The small diaphragm thickness and large height of the diaphragm relative to the diameter provide the following advantages:

- Low, almost constant resistance to movement over the entire stroke
- Considerably greater stroke lengths in comparison to conventional diaphragms with the same diameter
- Effective area remains the same over entire stroke
- No additional resistance to movement on starting or on change in direction of movement; no notch point in operating range
- Low requirements on piston and cylinder in comparison to lip seals.

APPLICATION

Long-stroke rolling diaphragms are used in hydraulically and pneumatically-activated control and regulation equipment, pressure switches and pressure transducers as well as measuring and display equipment. In the design without fabric, they are used at low pressures.

MATERIAL

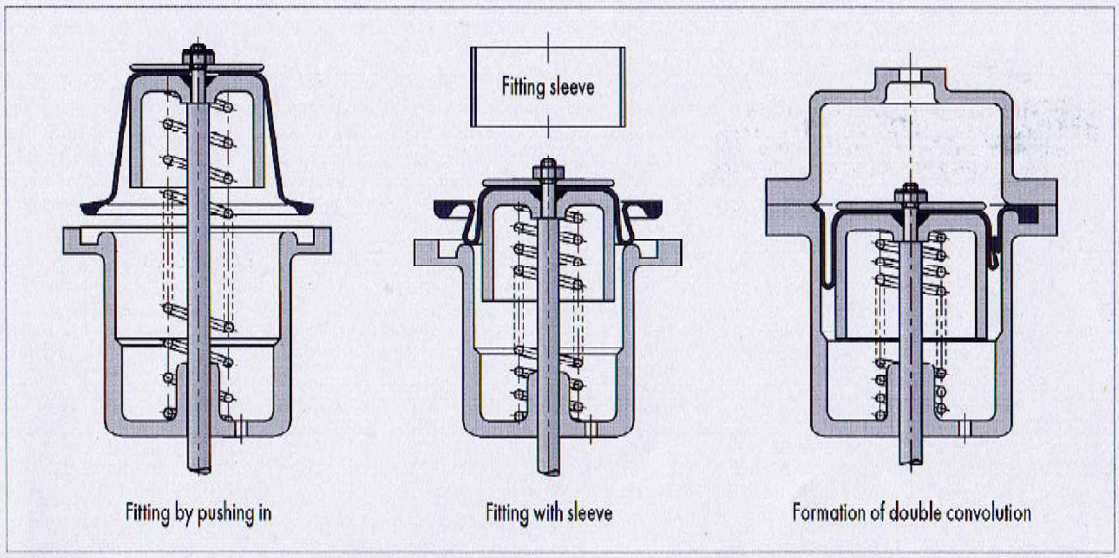
Standard material: 50 NBR 253 based on acrylonitrile-butadiene rubber (NBR) with or without polyester fabric → Technical Manual.
Details on general structure of long-stroke rolling diaphragms and the properties of the elastomers → Technical Manual.
Rolling diaphragms made from silicone rubber, fluoro rubber and EPDM with fabric are only produced to a height of $H_{max} = 0,6\ D_g$ (D_g = cylinder diameter).

OPERATING CONDITIONS

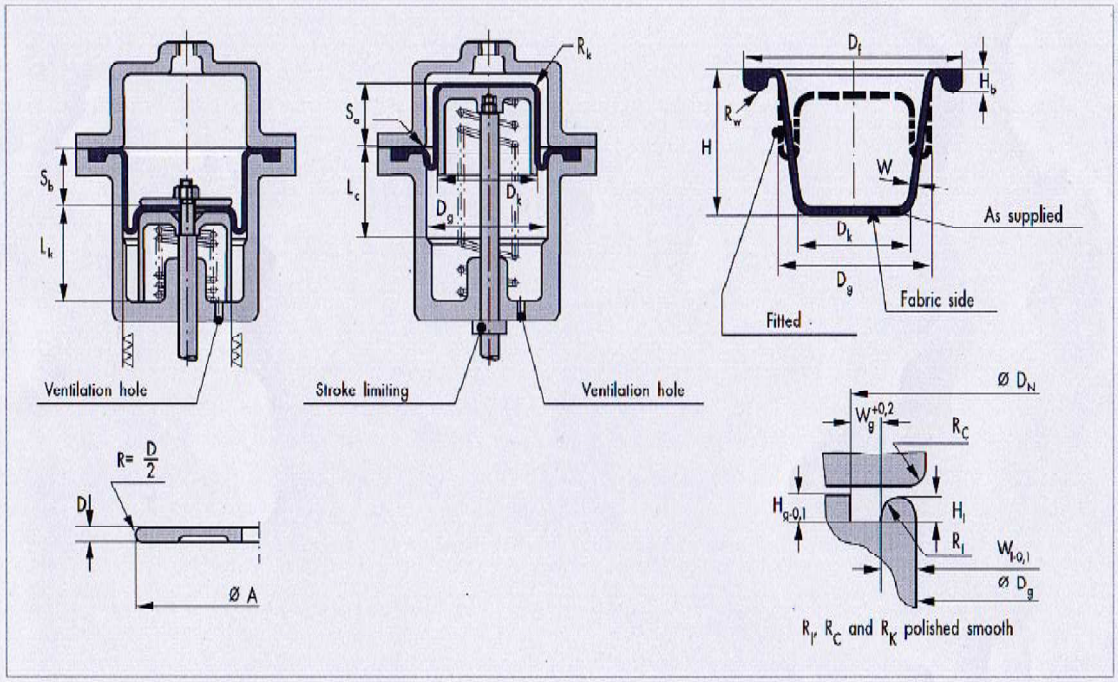
The standard range BFA made from nitrile rubber with fabric reinforcement for use in compressed air and mineral oils permits operating pressures up to 10 bar and test pressures up to 15 bar. Special qualities are available on enquiry for applications involving town gas and natural gas, petrol and brake fluids as well as for high thermal loads.
The type BFAO should only be used when the operating pressure does not exceed 1,5 bar. Low longitudinal elongation must be taken into account.
In operation, even with piston return, a low pressure difference of approx. 0,15 bar must be present for all designs, otherwise folds or kinks will form in the rolling convolution. This counter pressure can be achieved using a regulator valve. A ventilation hole must be provided to prevent a pressure build-up on the non-pressurised side.

FITTING & INSTALLATION

Long-stroke rolling diaphragms with fabric layer, the fabric must be on the non-pressurised side. The diaphragm is inverted before fitting. Should the rolling convolution formed in this way arch upwards when performing this action, the use of a mounting sleeve is necessary.
Do not use a screwdriver!
Another possible fitting method: fit inverted rolling diaphragm to the piston, place bead in the groove and push piston into the cylinder. In this way the rolling convolution is formed. The piston must be secured against twisting after fitting to avoid the formation of a skewed convolution. A plain washer is sufficient as the spring support. Stroke limiting is always to be provided. The rolling area for the diaphragm must to be finely machined and polished. The transition radii on the clamping flange, piston base and cover plate are to be smooth and free from scoring.



Fitting



Cylinder Ø	D_g	up to 60 mm	up to 100 mm	up to 150 mm	>150 mm
Installation dimensions					
Piston Ø	D_k	D_g –5	D_g –10	D_g –10	D_g –10
Groove Ø	D_n	D_g +15	D_g +21	D_g +27,5	D_g +27,5
Piston radius	R_k	3,50	4,50	5,80	7,00
Cover radius	R_c	2,00	2,00	2,00	2,00
Groove depth	H_g	3,00	4,00	5,00	5,00
Groove width	W_g	4,00	5,50	7,20	7,20
Rim width	W_i	3,50	5,00	6,50	6,50
Rim height	H_i	2,30	3,10	3,50	3,50
Rim radius	R_i	1,75	2,50	3,25	3,25
Diaphragm dimensions					
Flange Ø	D_f	D_g +14	D_g +20	D_g +26	D_g +26
Wall thickness	W	0,45	0,55	0,80	1,00
Flange bead	H_b	3,60	5,00	6,30	6,30
Radius	R_w	1,75	2,50	3,25	3,25
Minimum length of finely machined areas					
on the piston	L_k	0,5 (H+S_a)	0,5 (H+S_a)	0,5 (H+S_a)	0,5 (H+S_a)
on the cylinder	L_c	0,5 (H+S_b)	0,5 (H+S_b)	0,5 (H+S_b)	0,5 (H+S_b)
Diaphragm stroke					
in one direction max.	S_a	H–8	H–14	H–20	H–20
in opposite direction max.	S_b	H–8	H–14	H–20	H–20
Fastening plate					
	a	D_k+2,9	D_k+4,1	D_k+5,6	D_k+6
	D	1,5	3,0	4,0	5,0

CONDITIONS OF TENDER

Annexure for the enquiry

Sl. No.	Particulars	Description
1	Price	It should be quoted item-wise with tax, duties etc. In case packing and forwarding charges are involved the same should be shown separately, if not it will be treated as inclusive. The rates quoted should be in words and figures invariably.
2	GST, Cess, Surcharge, Excise Duty	• Taxes should be shown separately, wherever applicable. • Rates of taxes should be clearly indicated. • Excise duty & cess payable should be indicated separately with rates of duty/cess. • Other taxes should also be shown separately.
Note (a): If duty/cess and taxes are not shown specifically it will be assumed that the rates quoted are inclusive of the same for all purpose. However in the event of an order arising out of the offer, break-up of taxes and duties to be shown separately in the invoice. (b) : In case you are a SSI Unit/ Khadi and Village Industry, the same may be indicated with registration number and copy of the certificate.		
3	Basis of Price	The price should be quoted indicating either F.O.R Dispatching station or F.O.R Destination basis. If no specific mention is made in your offer, price will be treated as FOR Destination.
4	Validity of Offer	The tenders should be valid for a minimum period of 60 days from the due date.
5	Delivery Period	A firm delivery date/period should be indicated. Delivery period reckoned shall be treated from the date of release of purchase order.
6	Firm Price	In the event of order price shall be firm till complete execution of the order.
7	Payment Terms	Our payment term is within 30 days after receipt subject to acceptance of materials. Offers with other payment terms is liable to the rejected/cost loaded.
8	Correction and Errors	Quotation should be free corrections and errors.
9	Technical Details of Offer	Manufacturer's name, country of origin and brand/make of the materials offered must be clearly specified. Complete/detailed illustrated, literature must accompany all quotations.
10	ISI Marking	Contracts as a result of this tender enquiry will be only for stores having ISI marking and in case ISI marked articles are not available, stores strictly confirming to ISI specification will be preferred.
11	Penalty for Delay	Penalty shall be imposed in the form of Liquidated damages at the rate of 0.5% per week or part thereof of the value of the goods for the delayed period beyond the stipulated delivery date in the order duly accepted by vendor. This recovery will be limited to 10% of value of goods without prejudice to the purchaser's other rights.
12	Rights of Acceptance or Rejection of Tender	KPPL does not bind itself to accept the lowest or any tender or assign any reason for non acceptance. It further reserves the right to accept any tender wholly or in part at its option. It also reserves to itself the right to take 25% more/less of material on any orders placed against this enquiry.
13	Acceptance of Full/Part Quantity	Tenders should clearly mention whether the prices hold good when full quantity of enquiry is not ordered but only a part of it. Unless otherwise mentioned, it would be assumed that the rates hold good even for lesser quantities.
14	Vendors Registration No.	Please indicate in your quotation the registration No. and its validity, if any.
15	Non Submission of Offer	In case you are unable to submit the offer against this tender, please send a regret letter to that effect.
16	Price Evaluation	Price evaluation shall be based on the terms and conditions mentioned in the tender. In case of any deviations in the terms and conditions or in the technical specifications or in any other requirement, the company reserves the right to reject the submitted bids or do the price evaluation based on the impact of deviations in the bids, if any.
17	Submission of Offer	The offers should be submitted by e-mail in PDF format indicating our Enquiry No and due date to **tenders@kpplonline.in,** before due date.

HoD (Coml.)