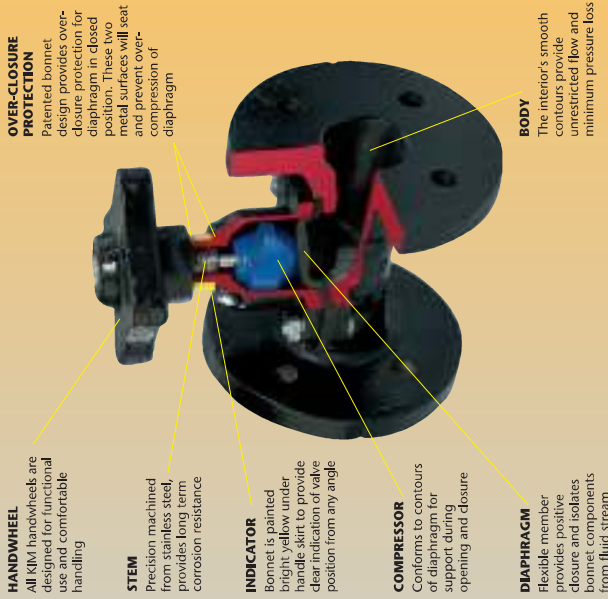


## STRAIGHT-THROUGH TYPE 'ST' DIAPHRAGM VALVES



**HANDWHEEL**  
All KIM handwheels are designed for functional use and comfortable handling

**STEM**  
Precision machined from stainless steel, provides long term corrosion resistance

**INDICATOR**  
Bonnet is painted bright yellow, under handle skirt to provide clear indication of valve position from any angle

**COMPRESSOR**  
Conforms to contours of diaphragm for support during opening and closure

**DIAPHRAGM**  
Flexible member provides positive closure and isolates bonnet components from fluid stream

**OVER-CLOSURE PROTECTION**  
Patented bonnet design provides over-closure protection for diaphragm in closed position. These two metal surfaces will seat and prevent over-compression of diaphragm

**BODY**  
The interior's smooth contours provide unrestricted flow and minimum pressure loss

### DIAPHRAGM RANGE

GRADE	MATERIAL
10	Natural rubber
20	EPDM/black rubber
2F	EPDM/food grade
30	Butyl rubber
40	Nitrile rubber
50	Neoprene rubber
60	Hypalon rubber
70	Viton rubber

### LINED AND COATED BODIES

CODE	MATERIAL
UL	Unlined
HL	Halar
GL	Glass
SR	Soft natural rubber
HR	Hard natural rubber
BR	Butyl rubber
NR	Neoprene rubber
HY	Hypalon rubber

**HAKOHAV**  
VALVES  
member of Gaon-Agro group



8 Hashlagan St. Kiryat-Gat, Israel 82021 Tel: +972 8 681 8899 Fax: +972 8 681 8801  
hakohav@zahav.net.il www.hakohav.co.il mail@kimvalves.com www.kimvalves.com

## STRAIGHT-THROUGH TYPE DIAPHRAGM VALVES

# ST



**HAKOHAV**  
VALVES  
member of Gaon-Agro group



# STRAIGHT-THROUGH TYPE 'ST' DIAPHRAGM VALVES



**KIM Diaphragm Valves** are known for their corrosion and abrasion resistance, offering features of leak tightness and low cost maintenance in severe service applications. The valves, based on simple operating principles, are now widely used by process engineers due to the increased range of diaphragms and body lining materials.

**KIM Straight-Through Diaphragm Valves** offer an unobstructed flow passage to the service media and are therefore ideally suited to handle viscous fluids, slurries and suspended solids. The straight-line-flow characteristic ensures a long service life when handling abrasive materials that require good flow capacity and leak-tight shut-off.

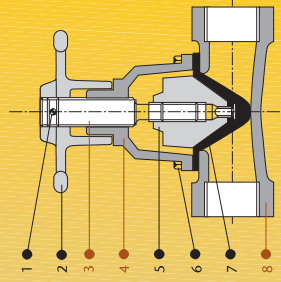
**KIM Straight-Through Diaphragm Valves'** manual bonnet assemblies incorporate position indication, and adjustable tamper-proof over-closure protection. Over-closure is the most common cause of diaphragm damage, particularly in temperatures above 80°C (175°F). The valves are suitable for internal cleaning by rodding, brushing or pigging.

Pneumatically, hydraulically and electrically operated **KIM Straight-Through Diaphragm Valves** are available for the automatic control of process plants. The actuators can be fitted with many forms of positioners, micro and proximity switches.

## MATERIAL SPECIFICATION

PART NO.	COMPONENT	MATERIAL
1*	Handwheel pin	Spring steel
2	Handwheel	Cast iron / stainless steel
3*	Stem	Stainless steel- AISI 304
4	Bonnet	Cast iron / stainless steel
5	Compressor	Cast iron / stainless steel
6*	Studs/bolts & nuts	Carbon steel, Grade 8.8
7	Diaphragm	As specified (see table)
8*	Body	Cast iron / ductile iron / stainless steel

\* Other materials available upon request



## ADVANTAGES

- In line maintenance offers ease of diaphragm changing in plant shut down situations.
- Bonnet and operating parts are completely isolated from line fluid, thus preventing contamination.
- No stem packing is required, thus avoiding one of the most common leak points in other types of valves.
- Resilient diaphragms ensure positive leak-tight closure.
- Choice of coated, lined or unlined bodies and a comprehensive range of diaphragms enable severe service applications.



Unlined



Glass lined



Halar/ECTFE coated



Rubber lined

- Soft natural rubber
- Hard natural rubber
- Butyl rubber
- Neoprene rubber
- Hypalon rubber

## FACE-TO-FACE DIMENSIONS FOR FLANGED VALVES

SIZE	BS 5156	DIN 3202	SP-88	SIZE	BS 5156	DIN 3202	SP-88
mm	mm	mm	inch	inch	mm	mm	inch
25	127	160	140	1	5	6%	5%
40	159	200	165	1½	6%	7%	6%
50	190	230	190	2	7%	9%	7%
65	216	290	216	2½	8%	11%	8%
80	254	310	254	3	10	12%	10
100	305	350	317	4	12	13%	12%
125	356	400	-	5	14	15%	-
150	406	480	406	6	16	18%	16
200	521	600	521	8	20%	23%	20%
250	635	730	635	10	25	28%	25
300	749	850	749	12	29%	33%	29%

For rubber-lined bodies add to total length (except standard DIN)

- 6 mm (¼") – for DN 25 - DN 80 (1"-3")
- 8 mm (5/8") – for DN 100 - DN 200 (4"-8")
- 10 mm (¾") – for DN 250 - DN 300 (10"-12")

## END-TO-END DIMENSIONS FOR SCREWED VALVES

SIZE	END-TO-END	NORMAL SIZE	END-TO-END
mm	mm	inch	inch
25	108	1	4%
50	168	2	6%

## WORKING PRESSURES

Maximum permissible working pressures within a temperature range of -10° to 50°C (14° to 122°F) are as follows:

DN (mm)	VALVE SIZE		PRESSURES	
	INCH	BAR	PSI	PSI
25 - 100	1-4	10	10	145
125 - 150	5-6	6	6	87
200 - 300	8-12	3.5	3.5	50

Higher temperatures will lower the physical properties of the various diaphragm materials and require a decrease in working pressures.

**DIMENSIONS ARE  
IN ACCORDANCE  
WITH STANDARDS:**

BS 5156, MSS SP-88,  
DIN 3202 F-1