

DESCRIPTION

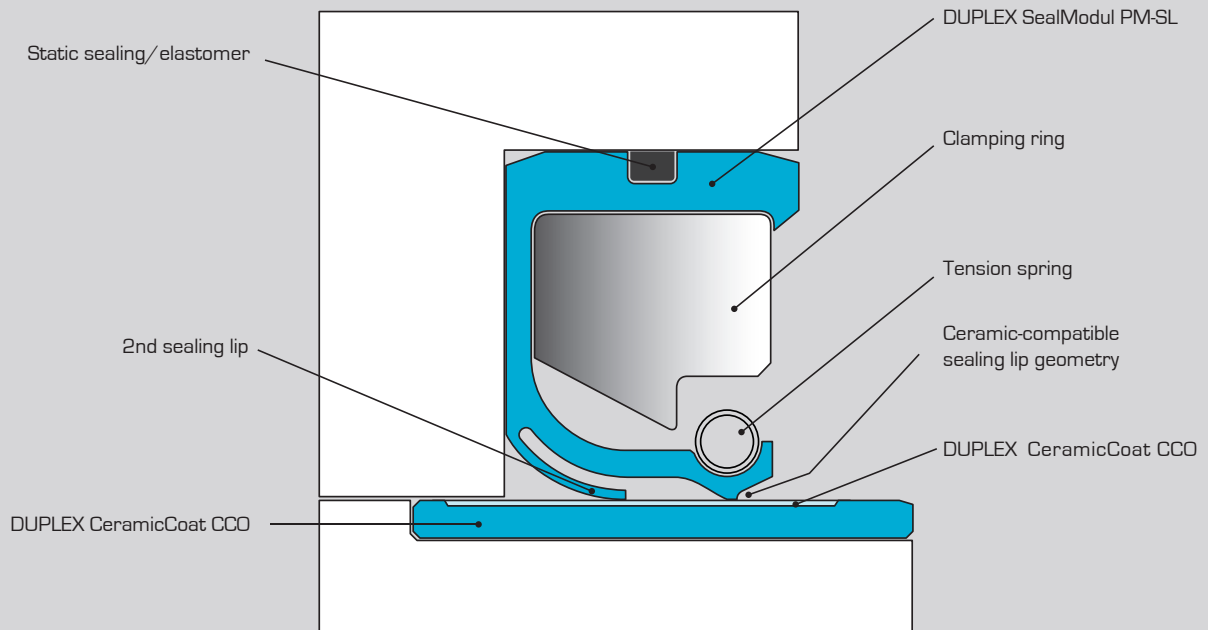
The DUPLEX SealModul PM has been designed for applications involving radial pressure – and hence requiring radial sealing. It's ideal whenever standard elastomeric radial shaft seals are no longer suitable owing to limitations resulting from their maximum permissible operating parameters. The DUPLEX SealModul PM is able to seal relatively high pressures dynamically. Added to this, its chemical resistance is excellent.

The plastic memory effect and the pre-stressed element ensure tight contact between the seal and its mating surface throughout operation. Their job is to compensate for any axial or angular displacement of the mating surface during simultaneous rotation. Any rated diameter between 100mm and 1,800mm can be produced.

Applications

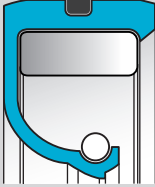

The DUPLEX SealModul is equally suitable for rotary, swivelling and linear movements. It guarantees reliable sealing in fluids with high or low viscosity over a wide pressure range.

SYSTEM COMPONENTS/STRUCTURE





TYPES/SPECIAL CHARACTERISTICS

<p>PM</p>		<ul style="list-style-type: none"> - High circumferential speeds up to 45 m/s - Particularly suitable in calenders and rollers in the paper industry - Easy to fit
<p>PM-SL</p>		<ul style="list-style-type: none"> - High circumferential speeds up to 45 m/s - Suitable for axial displacement up to 2mm - Particularly suitable in calenders and rollers in the paper industry - Easy to fit - Double lip for extra tightness



PROPERTIES

	Pressure	Temperature range	Sliding speed	Eccentricity/ axial displacement	Fluids
PM PM-SL	5 bar (higher on request)	-60°C TO 320°C	40 m/s	0,5° / 2mm	Oil flowing upstream of seal: at least 8 l/min Hydraulic oils [HL, HLP, HLPG], HFA, HFB, HFC, H2O

APPLICATIONS

CHARACTERISTICS

Shaft seals	System pressure dependent sealing
Pumps	High wear resistance
Gear seals	Low coefficient of friction
Fan seals	No stick-slip at low speeds
Bearing seals	No adhesion of the sealing ring after a prolonged idle period
Roller and calender seals	Dry running possible
Deflection compensation rollers	Resistant to pressure spikes and diesel effect

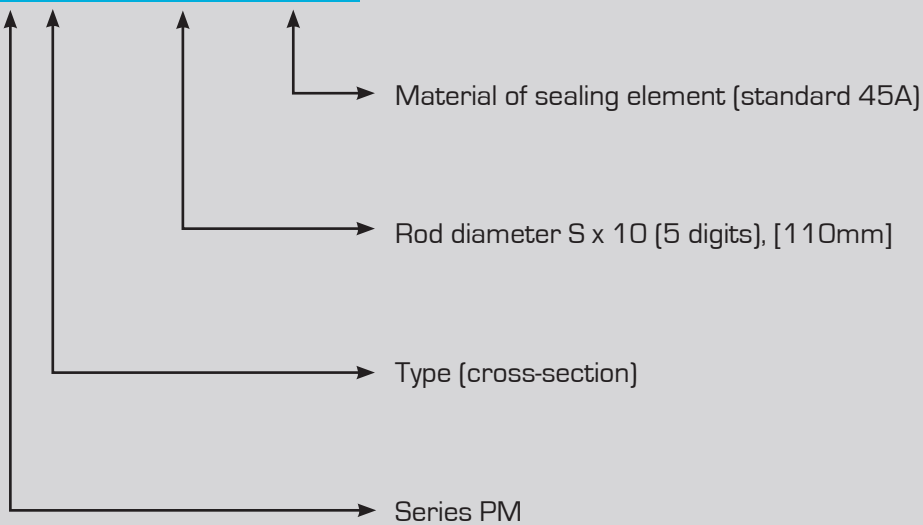


ORDERING DETAILS - STANDARD

Example for ordering - dimensions: metric

DUPLEX SealModul PM

PM901 - 01100 - 45A

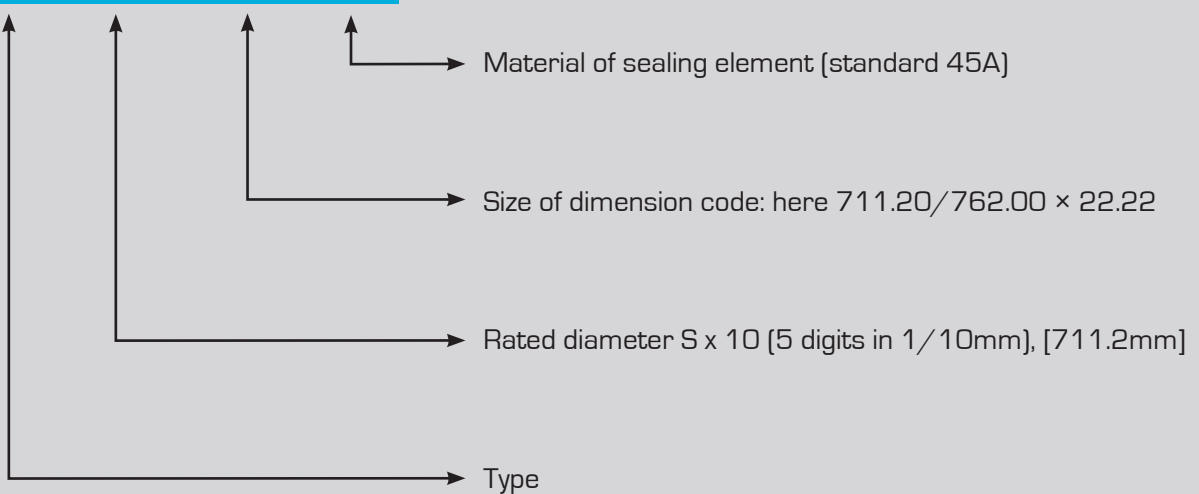


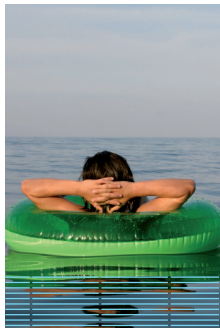
ORDERING DETAILS - CUSTOM/PROJECT

Example for ordering - dimensions: inches

DUPLEX SealModul PM

PM - 07112 - 4344 - 45A



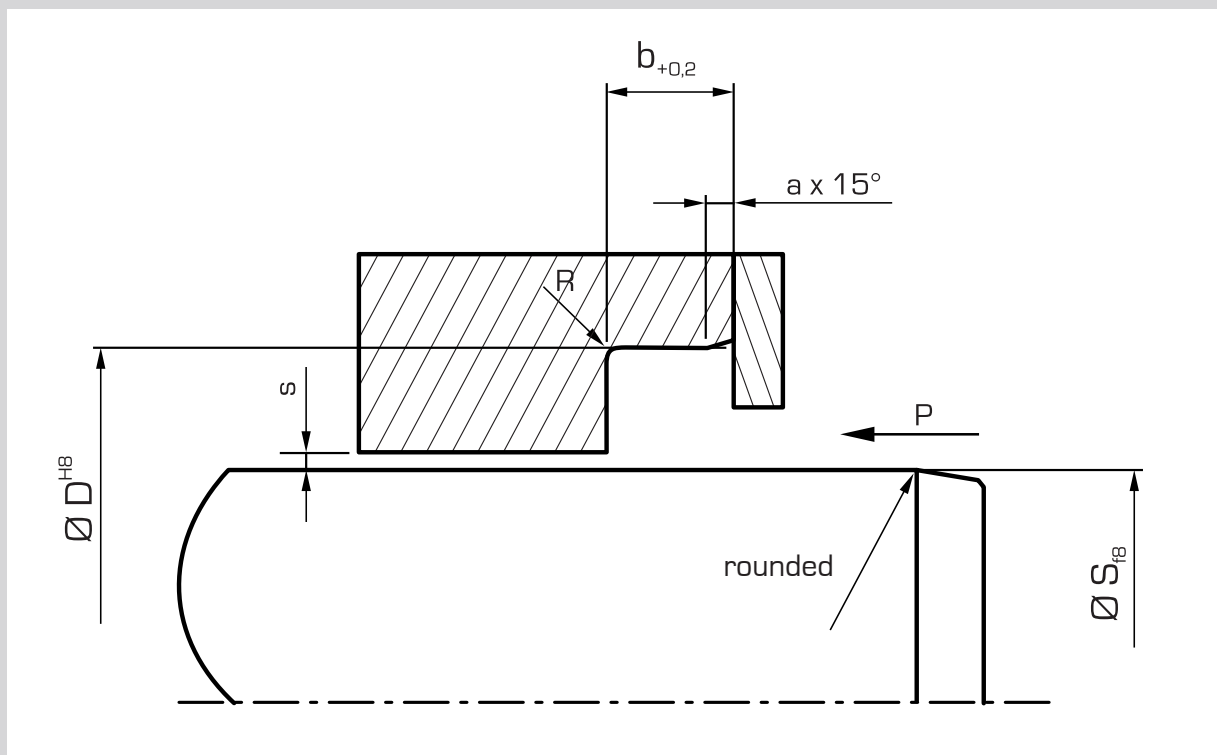


MATERIALS – see 'Materials' data sheet

Sealing ring: 45A

Clamping ring: 1.0831

INSTALLATION DRAWING





Fitting dimensions*

Rod diameter $\varnothing S_f$	Groove base diameter $\varnothing D^{H8}$	Groove width $b^{+0.2}$	Gap height** s	Groove base radius R	Fitting chamfer a	DUPLEX SealModul Ausführung: PM / PM-SL Typ
10 - 60	S + 12	7	0,5	1	1,5	PM 901 / PM-SL 901
> 60 - 200	S + 18	11	1	1,5	2	PM 902 / PM-SL 902
> 200 - 500	S + 24	14	2	2	3	PM 903 / PM-SL 903
> 500 - 1000	S + 40	20	3	2	4	PM 904 / PM-SL 904

* Please note that the fitting dimensions are only approximate values.

** Depending on eccentricity and axial displacement.

RECOMMENDATION

The recommendations regarding the use of seals were determined in trials and verified in a wide range of different applications over several years. Even so, we recommend that you conduct your own tests to confirm the suitability of seals for your requirements.