

## DESCRIPTIロN

Double acting piston seal for pneumatic cylinders

MATERIAL ロN DYNAMIC SURFACE
Type：
Polyurethane
Designation： SEALPUR 93
Hardness： $93^{\circ}$ ShA

MATERIAL ロN STATIC SURFACE
Type：
Nitrile Rubber NBR
Designation： RUBSEAL 70
Hardness： $70^{\circ} \mathrm{Sh} A$

## MAIN FEATURES

The seal type KPDP has been specially developed for pistons of double－acting cylinders and is composed of：
－a dynamic seal element in polyurethane that ensures excellent wear－ resistance and good sealing performance．
－a standard size O－Ring with low permanent deformation as energizing component on the static side．
The polyurethane used to produce the dynamic element is a compound， specifically developed for the production of pneumatic seals，that ensures excellent properties on wear－resistance，extended service life and low permanent deformation．
－Space－saving construction
－Simple groove design
－Excellent wear－resistance
－Extended service life
－Low cost solution
－Easy installation without expensive auxiliaries
－High resistance to pressure peaks

## FIELD ロF APPLICATIロN

| Pressure | over 20 bar |
| :--- | :--- |
| Speed | $\leq 1 \mathrm{~m} / \mathrm{s}$ |
| Temperature | $-35^{\circ} \mathrm{C} \div+80^{\circ} \mathrm{C}$ |
| Fluids | Air with or without lubrication，grease，mineral oils， <br> non－aggressive gases，etc． |

SURFACE RロUGHNESS

| Dynamic surface | $\mathrm{Ra} \leq 0.25 \mu \mathrm{~m}$ | $\mathrm{Rt} \leq 2.5 \mu \mathrm{~m}$ |
| :--- | :--- | :--- |
| Static surface | $\mathrm{Ra} \leq 0.8 \mu \mathrm{~m}$ | $\mathrm{Rt} \leq 6.3 \mu \mathrm{~m}$ |


| LEAD－IN CHAMFERS | D | S $_{\text {min }}$ |
| :--- | :--- | :--- |
|  | less 20 | 3 mm |
|  | $20 \div 50$ | 4 mm |
|  | $51 \div 150$ | 5 mm |
|  | －over 150 | 6 mm |

－to avoid damaging the sealing lips during installation，housing must have rounded chamfers．Sharp edges and burrs within the installation area of the seal must be removed

DロபBLE ACTING PISTロN SEAL


| Part. | D ${ }^{\text {H10 }}$ | d ${ }^{\text {n9 }}$ | L ${ }^{+0.2}$ | OR | Tp. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KPDP 1692.5 | 16 | 9 | 2.5 | 611 | (a) |
| KPDP 20132.5 | 20 | 13 | 2.5 | 014 | (a) |
| KPDP 25182.5 | 25 | 18 | 2.5 | 017 | (a) |
| KPDP 32233 | 32 | 23 | 3 | 813 | (a) |
| KPDP 35263 | 35 | 26 | 3 | 120 | (a) |
| KPDP 45363 | 45 | 36 | 3 | 126 | (a) |
| KPDP 63514 | 63 | 51 | 4 | 226 | (b) |
| KPDP 1251105 | 125 | 110 | 5 | 244 | (b) |

