



ZPD

EXTERNALGEARDOSING PUMP



Our most flexible line of external gear pumps, the ZPD has been used in countless applications the world over. The basis of its success stems from a platform of customisation that rivals even the most competent competitors. Available in cast iron and stainless steel bodies, the ZPD flaunts 43 displacement sizes, 5 shaft seal options and multiple bearing and wear plate choices. ZPD gear pumps are specifically used for wide flow range metering applications and transfer applications. Volumetric efficiency values of over 90% are typically achieved.

OPERATING CONDITIONS

SPEED

10 – 1,750 rpm
(Depending on the respective operating conditions)

PUMP PRINCIPLE

External spur gears

ROTATION

Clockwise (cw), right
Counterclockwise (ccw), left

VISCOSITY

0.8 – 1,000,000 mPa·s
(Depending on the respective operating conditions)

DISPLACEMENTS CC/REV

See chart on page 5.

TEMPERATURE

-20°C up to +150°C (standard version)
Special designs are available up to 350°C

PRESSURE

Operating pressure max. 200 bar
Varies with size and material specification.
See chart on page 5 for details.

MATERIALS

316 stainless steel body with 440B wear parts, or cast iron body with hardened steel wear parts.

COMMON APPLICATIONS

Metering of polyurethanes, isocyanate, polyol, catalyst, additives, silicones, adhesives, oils and diesel fuel

HIGHLIGHTS

- Low-pulsation and precise dosing of the medium being transferred
- High pressures
- Large flow range
- Multiple construction material options
- Multiple sealing options

DISPLACEMENT SIZES & SPECIFICATION

Size	Displacements cc/rev	Operating pressure bar		Flowrate [l/min] at				
		KIS	KIN	1,750 rpm <200 mPa·s	600 rpm <2,000 mPa·s	300 rpm <10,000 mPa·s		
1	0.30	180	40	0.53	0.18	0.09		
1	0.50			0.88	0.30	0.15		
1	0.87			1.52	0.52	0.26		
1	1.17			2.05	0.70	0.35		
1	1.46			2.56	0.88	0.44		
1	1.90			3.33	1.14	0.57		
1	2.50			4.38	1.50	0.75		
1	3.20			5.60	1.92	0.96		
1	3.80			6.65	2.28	1.14		
1	5.10			8.93	3.06	1.53		
1	7.30			12.78	4.38	2.19		
2	3.90	180	40	6.83	2.34	1.17		
2	7.80			13.65	4.68	2.34		
2	11.80			20.65	7.08	3.54		
2	15.70			27.48	9.42	4.71		
2	19.60			34.30	11.76	5.88		
2	23.60			41.30	14.16	7.08		
3	17.30	160	40	30.28	10.38	5.19		
3	22.00			38.50	13.20	6.60		
3	29.40			51.45	17.64	8.82		
3	37.40			65.45	22.44	11.22		
3	45.40			79.45	27.24	13.62		
3	60.00			105.00	36.00	18.00		
3	72.00	140		126.00	43.20	21.60		
4	44.40	180	40	77.70	26.64	13.32		
4	57.90			101.33	34.74	17.37		
4	74.50			130.38	44.70	22.35		
4	89.30			156.28	53.58	26.79		
4	110.00			192.50	66.00	33.00		
4	131.00			229.25	78.60	39.30		
4	149.00			260.75	89.40	44.70		
4	166.80			291.90	100.08	50.04		
4	184.60			323.05	110.76	55.38		
4	223.00			390.25	133.80	66.90		
4	236.00	413.00	141.60	70.80				
4	280.00	120	40	490.00	168.00	84.00		
4	316.00			553.00	189.60	94.80		
4	354.00			619.50	212.40	106.20		
4	400.00			700.00	240.00	120.00		
4	434.00			50	40	759.50	260.40	130.20
4	472.00					826.00	283.20	141.60
4	517.00					904.75	310.20	155.10

Sizes up to 2,600 cc/rev available on request.