

Series NV, with integrated overflow valve and bypass

1.4

Technical selection chart; scale drawings

Direction of rotation I = indirect – counterclockwise
D = direct – clockwise

The direction of rotation can only be changed in the factory.
Therefore, specify the desired direction of rotation as viewed from the pump shaft as per dimension sheet when ordering.



NV series

hp-Internal gear pumps to 40 bar (direction of rotation I = indirect – counterclockwise)

hp-Internal gear pump Series NV Sizes:	Viscosity: 6 mm ² sec ⁻¹ at 20°C								Gear rotor size Ø	Shaft Ø	Threaded connection* pipe thread DIN ISO 228	Manometer connection* pipe thread DIN ISO 228	max. permitted pump speed (RPM) at I/D	Net weight (kg) at I/D
	n = 1400 RPM Discharge l/h				n = 2800 RPM Discharge l/h									
	at 9 bar	at 30 bar	at 40 bar	Item No. I	at 9 bar	at 30 bar	at 40 bar	Item No. I						
NVBR P	45	30	20	011/0015	90	60	50	013/0015	25	12	3/8"	1/4"	3500	2.8
NVBR M	80	60	50	011/0016	160	130	120	013/0016	25	12	3/8"	1/4"	3500	2.8
NVBR G	120	100	80	011/0017	240	200	190	013/0017	25	12	3/8"	1/4"	3500	2.8
NVBR F	160	140	120	011/0018	320	270	260	013/0018	25	12	3/8"	1/4"	3500	2.8
NVBGR PP	150	100	80	011/0075	300	240	210	013/0025	38	12	1/2"	1/4"	3500	3.8
NVBGR PZ	200	160	140	011/0076	400	310	280	013/0028	38	12	1/2"	1/4"	3500	3.8
NVBGR P	300	240	200	011/0028	600	520	480	013/0026	38	12	1/2"	1/4"	3500	3.8
NVBGR MZ	–	–	–	–	850	750	700	013/0074	38	12	1/2"	1/4"	3500	3.8
NVBGR M	450	390	360	011/0029	900	850	730	013/0027	38	12	1/2"	1/4"	3500	3.8
NVBGR GZ	–	–	–	–	1100	1000	870	013/0029	38	12	1/2"	1/4"	3500	3.8
NVBGR G	600	540	480	011/0030	1200	1080	960	013/0034	38	12	1/2"	1/4"	1700	3.8
NVBHR P	1000	700	600	011/0040	–	–	–	–	56	18	3/4"	1/4"	1700	8.6
NVBHR M	1500	1200	1000	011/0041	–	–	–	–	56	18	3/4"	1/4"	1700	8.6
NVBHR G	2000	1700	1400	011/0042	–	–	–	–	56	18	3/4"	1/4"	1700	8.6

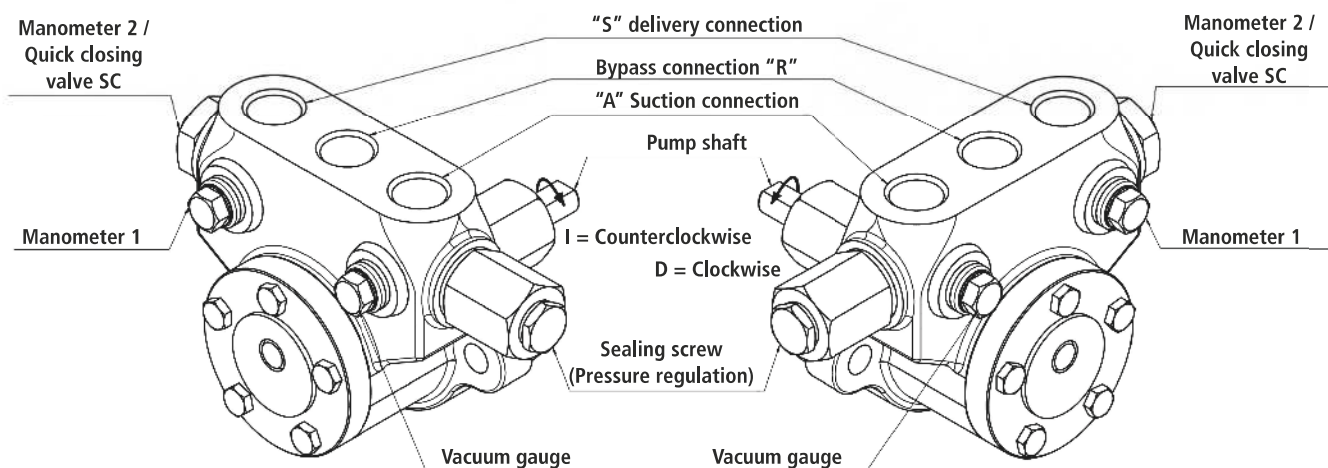
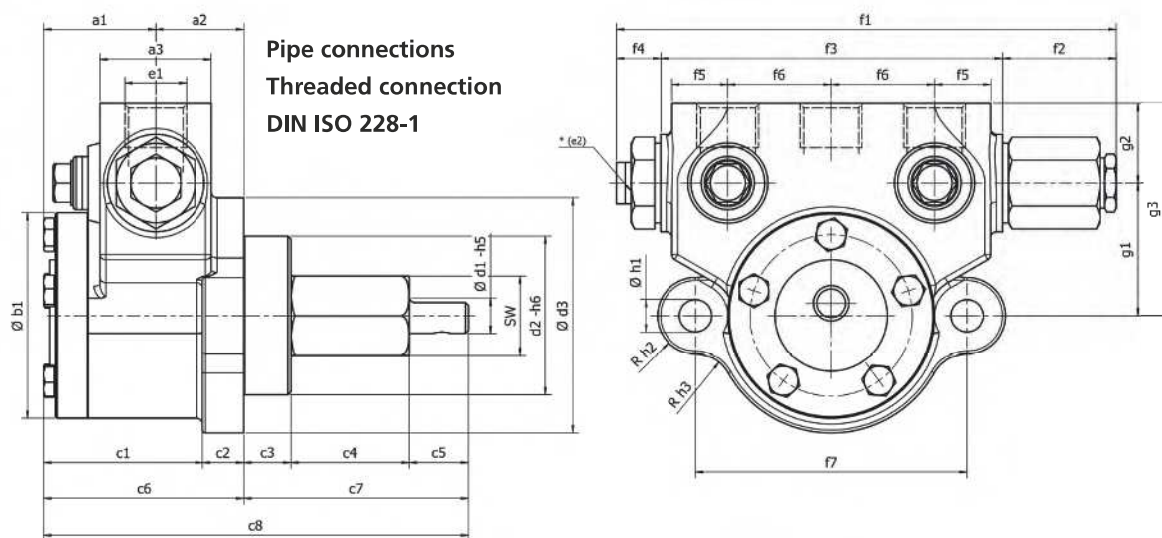
hp-Internal gear pumps to 40 bar (direction of rotation D = direct – clockwise)

hp-Internal gear pump Series NV Sizes:	Viscosity: 6 mm ² sec ⁻¹ at 20°C								Gear rotor size Ø	Shaft Ø	Threaded connection* pipe thread DIN ISO 228	Manometer connection* pipe thread DIN ISO 228	Heating power H1 in Watt 230 V, 50 Hz	Breakaway torque of the pump (Nm)
	n = 1400 RPM Discharge l/h				n = 2800 RPM Discharge l/h									
	at 9 bar	at 30 bar	at 40 bar	Item No. D	at 9 bar	at 30 bar	at 40 bar	Item No. D						
NVBR P	45	30	20	012/0015	90	60	50	014/0015	25	12	3/8"	1/4"	100	1.2
NVBR M	80	60	50	012/0016	160	130	120	014/0016	25	12	3/8"	1/4"	100	1.2
NVBR G	120	100	80	012/0017	240	200	190	014/0017	25	12	3/8"	1/4"	100	1.2
NVBR F	160	140	120	012/0018	320	270	260	014/0018	25	12	3/8"	1/4"	100	1.2
NVBGR PP	150	100	80	012/0075	300	240	210	014/0025	38	12	1/2"	1/4"	100	1.6
NVBGR PZ	200	160	140	012/0076	400	310	280	014/0028	38	12	1/2"	1/4"	100	1.6
NVBGR P	300	240	200	012/0028	600	520	480	014/0026	38	12	1/2"	1/4"	100	1.6
NVBGR MZ	–	–	–	–	850	750	700	014/0074	38	12	1/2"	1/4"	100	1.6
NVBGR M	450	390	360	012/0029	900	850	730	014/0027	38	12	1/2"	1/4"	100	1.6
NVBGR GZ	–	–	–	–	1100	1000	870	014/0029	38	12	1/2"	1/4"	100	1.6
NVBGR G	600	540	480	012/0030	1200	1080	960	014/0034	38	12	1/2"	1/4"	100	1.6
NVBHR P	1000	700	600	012/0040	–	–	–	–	56	18	3/4"	1/4"	160	3.2
NVBHR M	1500	1200	1000	012/0041	–	–	–	–	56	18	3/4"	1/4"	160	3.2
NVBHR G	2000	1700	1400	012/0042	–	–	–	–	56	18	3/4"	1/4"	160	3.2

* To ensure the pump is working properly, the pipes must be scaled according to the principles of fluid dynamics by calculation of line according to the local requirements. The pump or device connection gives no indication of the relevant size of the pipe.

Scale drawings for Series NV

1.4



Gear rotor size Ø	Discharge l/h		a1	a2	a3	b1	c1	c2	c3	c4	c5	c6	c7
	1400 RPM	2800 RPM											
25	45 - 160	90 - 320	35.5	20	33	51	41.5	14	16	40	20	55.5	76
38	150 - 600	300 - 1200	39.5	30	38	70	55.5	14	16	40	20	69.5	76
56	1000 - 2000	-	48.5	38	45	96	71.5	15	18	79	27	86.5	124

Gear rotor size Ø	Discharge l/h		c8	d1	sw/e	d2	d3	e1	*e2	f1	f2	f3	f4
	1400 RPM	2800 RPM											
25	45 - 160	90 - 320	131.5	12	27/31.2	54	80	G 3/8"	G 3/8"	169	38.5	116	15
38	150 - 600	300 - 1200	145.5	12	27/31.2	54	80	G 1/2"	G 3/8"	169	38.5	116	15
56	1000 - 2000	-	210.5	18	46/53.1	60	100	G 3/4"	G 3/8"	200	35	150	15

Gear rotor size Ø	Discharge l/h		f5	f6	f7	f8	f9	g1	g2	g3	h1	h2	h3
	1400 RPM	2800 RPM											
25	45 - 160	90 - 320	25.5	32.5	92	166	18	40	27	67	11	13	13
38	150 - 600	300 - 1200	23	35	92	166	18	45	27	72	11	13	13
56	1000 - 2000	-	25	50	120	203	26.5	65	40	105	13	13	25

With G 1/4" manometer connection on the front