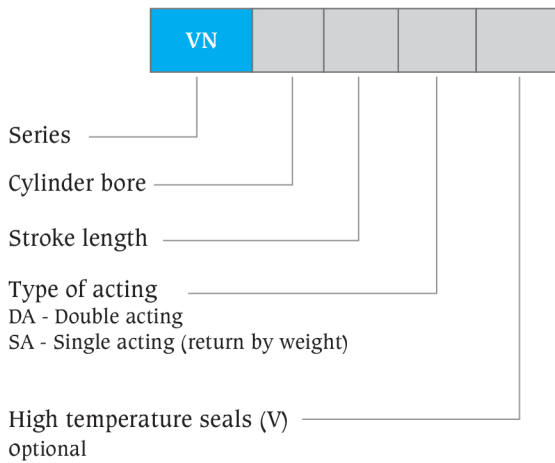


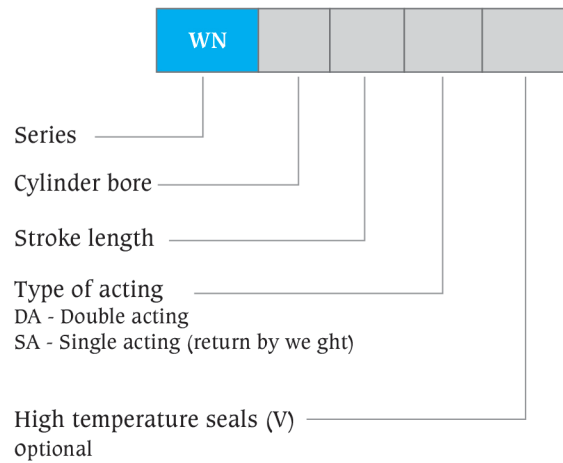
### Cylinder selection guide

Operating pressure at kg/sq. cm				Theoretical forces (at mechanical efficiency = 100%)							
				50		80		100		160	
Piston dia mm	Rod dia mm	Piston area sq. cm	Rod area sq. cm	Push kgf	Pull kgf	Push kgf	Pull kgf	Push kgf	Pull kgf	Push kgf	Pull kgf
40	25	12.57	4.91	628.4	382.93	1005.44	612.69	1256.8	765.86	2010.88	1225.38
50	32	19.64	8.04	981.88	579.70	1571.00	927.52	1963.75	1159.40	3142	1855.04
63	40	31.18	12.57	1558.82	930.42	2494.12	1488.68	3117.65	1860.85	4988.24	2977.36
80	45	50.27	15.91	2513.6	1718.28	4021.76	2749.25	5027.2	3436.56	8043.52	5498.50
100	50	78.55	19.64	3927.5	2945.63	6284	4713.00	7855	5891.25	12568	9426.00

#### Ordering details for VN series hydraulic cylinder



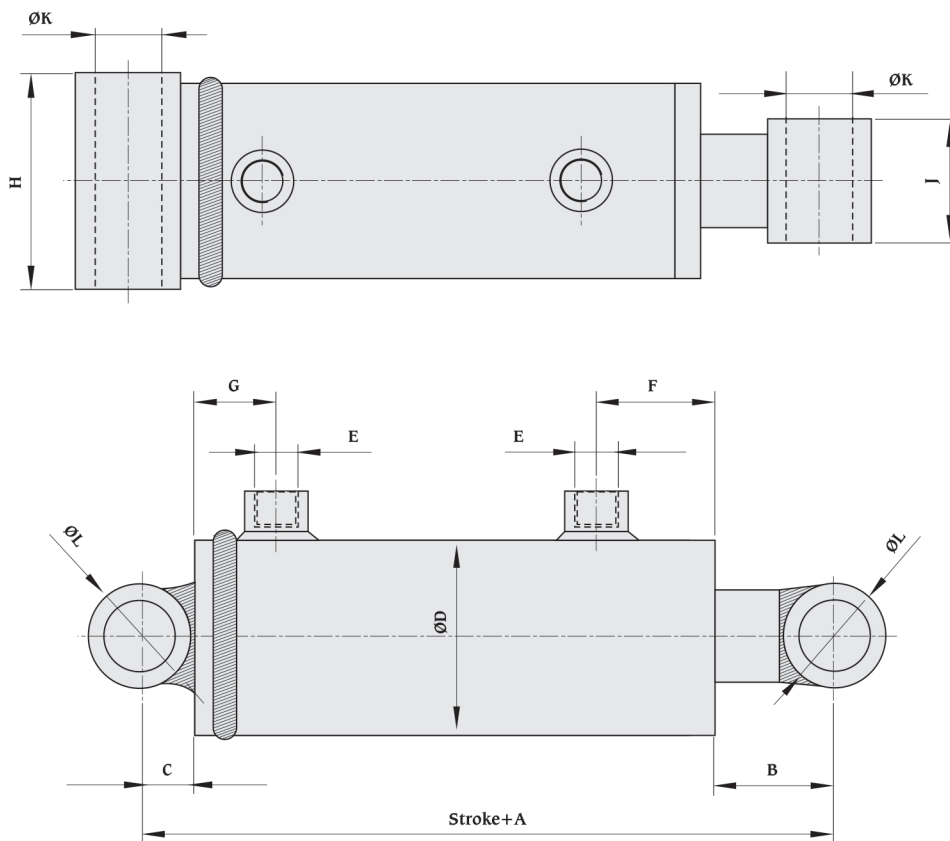
#### Ordering details for WN series hydraulic cylinder



All dimensions are in millimeters unless otherwise stated.

## Features and specifications

- Low cost cylinder
  - Thoroughly tested to our standard quality and performance
  - Double acting & single acting versions
  - Bore sizes : 40mm to 100mm
  - Strokes available in up to 1000mm stroke length
  - Single rod designs
  - Ideal for construction, agriculture and other industries
- Maximum working pressure : 160 bar
  - Piston rods : Precision ground & hard chrome plated
  - Non-cushioned
  - Temperature range : - 20°C to +80°C (standard)  
- 20°C to 150°C (optional)
  - Standard fluid : Mineral oil DIN 51524 (HL, HLP)
  - Seal types to suit a wide variety of operating environments

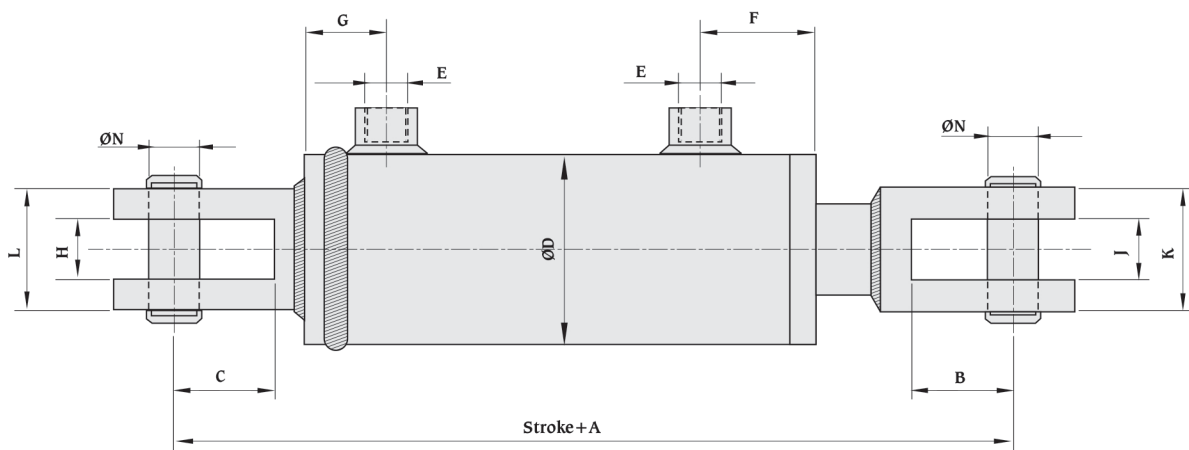
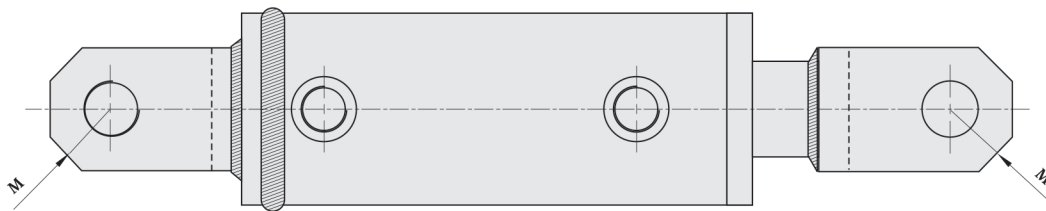


Piston $\varnothing$	Rod $\varnothing$	A	B	C	D $\varnothing$	E BSP	F	G	H	J	K $\varnothing$	L $\varnothing$
40	25	175	40	16	50	3/8"	49	24	55	50	20	32
50	32	185	45	19	60	3/8"	49	24	70	55	25	38
63	40	201	45	19	73	3/8"	54	24	80	55	25	38
80	45	232	60	25	94	1/2"	60	30	100	65	32	50
100	50	252	70	28	114	1/2"	65	32	120	70	38	56

All dimensions are in mm unless otherwise stated.

## Features and specifications

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  - Seal types to suit a wide variety of operating environments



Piston Ø	Rod Ø	A	B	C	D Ø	E BSP	F	G	H	J	K	L	M	N Ø
40	25	213	30	30	50	3/8"	49	24	20	20	40	40	23	16
50	32	239	40	40	60	3/8"	49	24	25	25	49	49	28	20
63	40	267	40	40	73	3/8"	54	24	25	25	49	49	28	20
80	45	312	50	50	94	1/2"	60	30	30	30	60	60	32	25
100	50	326	50	50	114	1/2"	65	32	30	30	60	60	32	25

All dimensions are in mm unless otherwise stated.