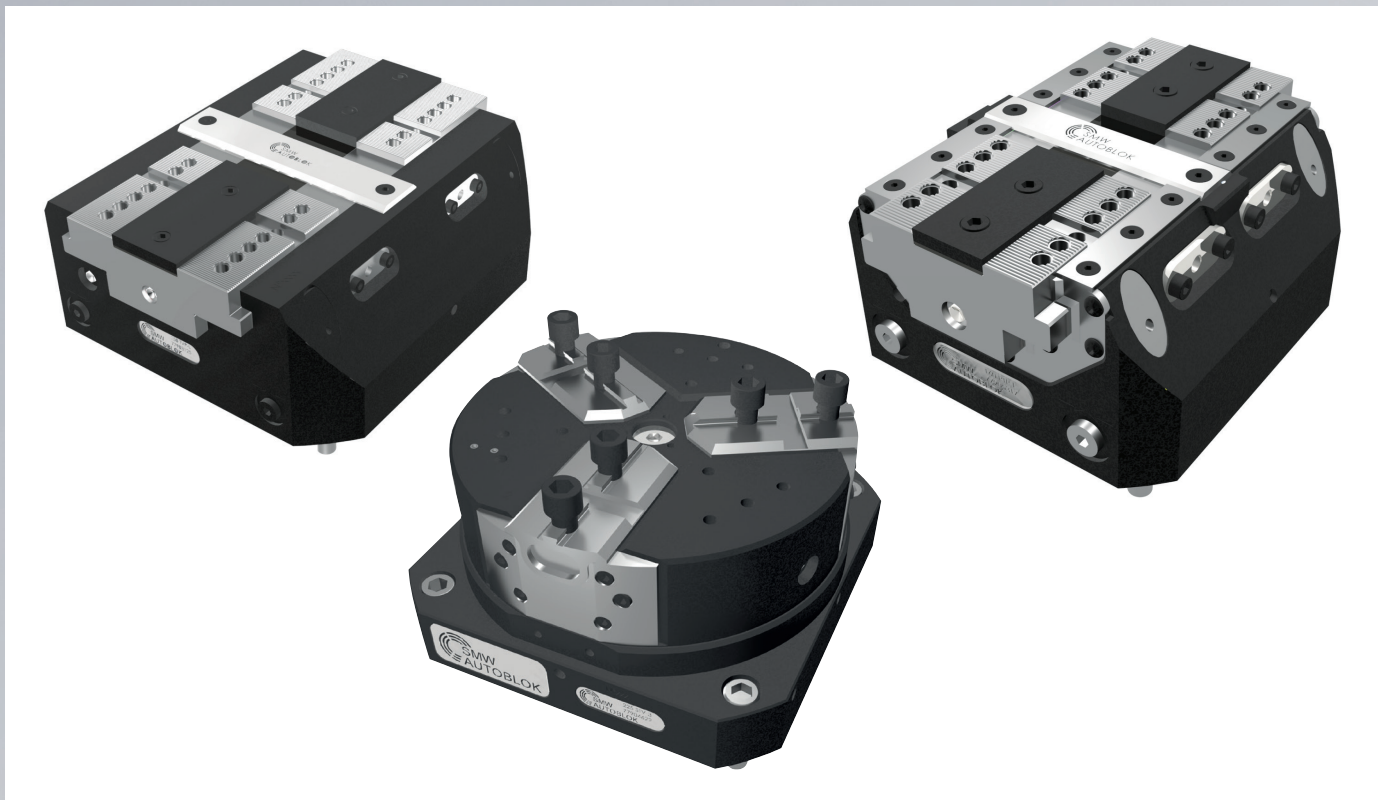


# TWIN VISES

Range of products



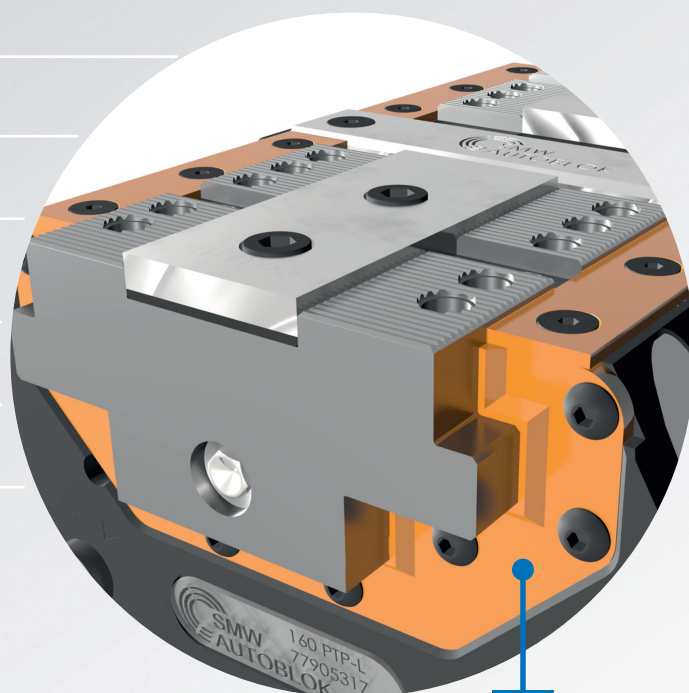
Industry 4.0  
Product



## 1 PT - PROTECTED TWIN VISES

SIZES AVAILABLE 100-125-160-200-250

- ▶ Pneumatic and Hydraulic Version
- ▶ Pneumatic Valve (optional)
- ▶ Air Sensing
- ▶ Master jaws guide protected against swarf and chips **1.1**
- ▶ Normal Stroke
- ▶ Long Stroke
- ▶ Fixed Jaw

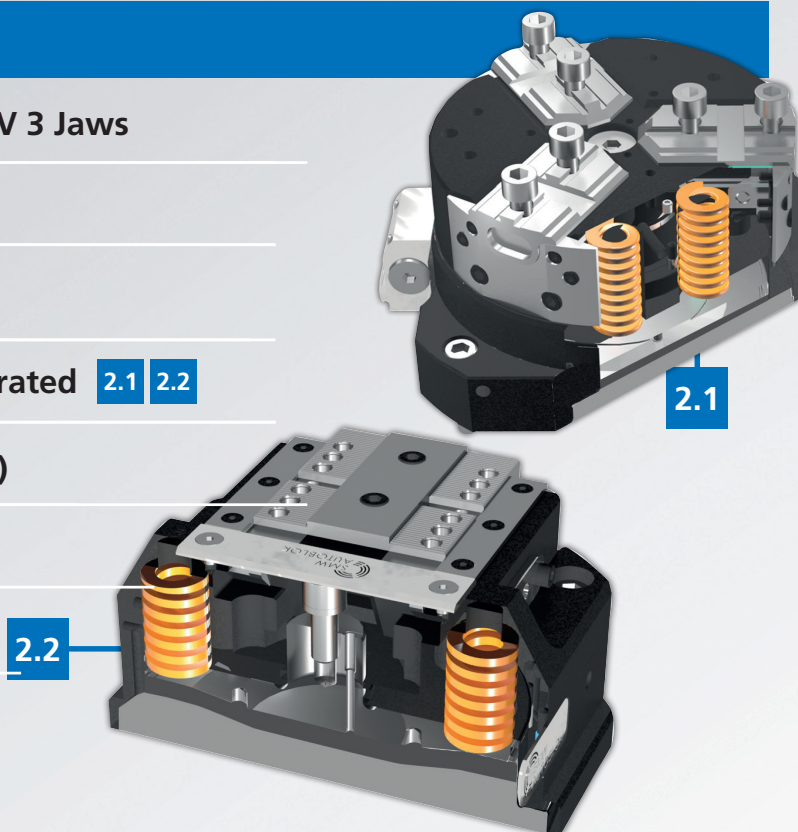


1.1

## 2 STV - SPRING AND AIR OPERATED TWIN VISES

SIZES AVAILABLE 180-225

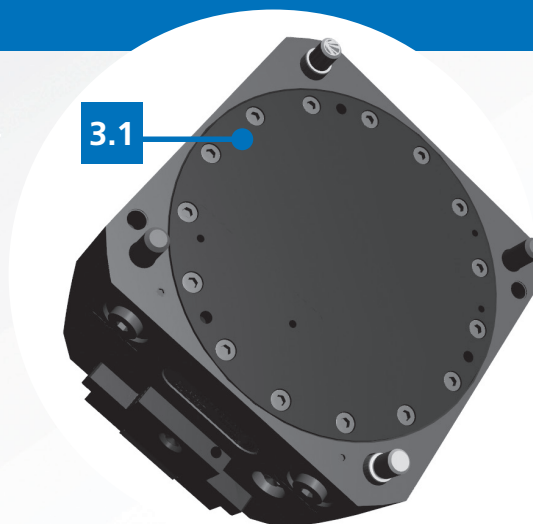
- ▶ STV 2 Jaws (also 125) and STV 3 Jaws
- ▶ Air Sensing
- ▶ Master jaws guide protected against swarf and chips
- ▶ Spring Clamped and Air Operated **2.1** **2.2**
- ▶ Safety Valve SAB-1 (optional)
- ▶ Pneumatic Valve (optional)
- ▶ Normal stroke **2.2**
- ▶ Long stroke



## 3 TV - STANDARD TWIN VISES

SIZES AVAILABLE 100-160-200-250-315

- ▶ Pneumatic and Hydraulic Version
- ▶ Air Sensing **3.1**
- ▶ Stroke control Proximity (optional)
- ▶ Normal Stroke
- ▶ Long Stroke
- ▶ Fixed Jaw

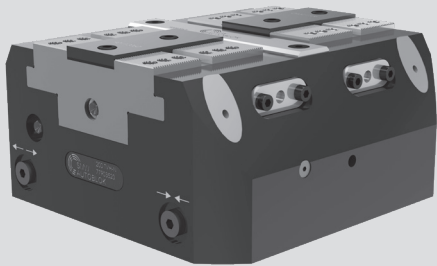


## 4 RR - QUICK JAWS CHANGE

PROTECTED TWIN VISE with QUICK CHANGE

- ▶ Pneumatic and Hydraulic Version
- ▶ Long stroke
- ▶ OD and ID Clamping

- TVH-N: Normal stroke
- TVH-L: Long stroke
- TVH-F: One fixed jaw



### Application/customer benefits

- Compact design
- Linear pressure adjustment
- Highest repeatability
- Highest rigidity

### Technical features

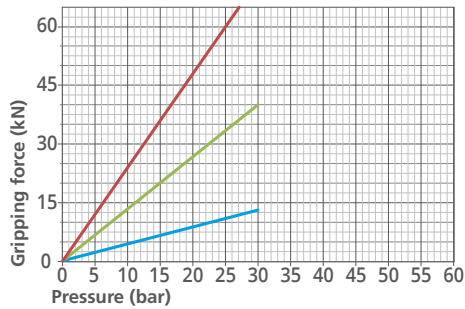
- H7 quality pilot bore (see p2 below)
- Housing and functional parts hardened for high precision and long life
- Ready for air purge
- Ready for central grease lubrication
- Master jaws with both tongue & groove and fine serration 1.5 mm x 60°
- OD and ID clamping
- Lubrication with SMW-AUTOBLOK K67 grease
- Stroke control via proximity switches (optional)

### Standard equipment

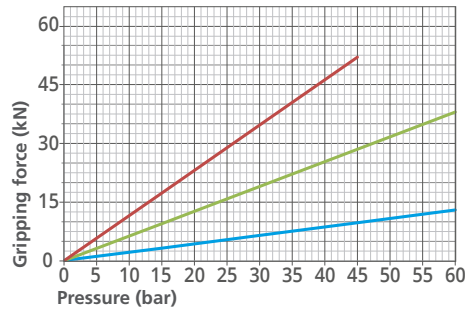
Self-centering vise without top jaws  
All bolts and centering bushings included

### Gripping force diagrams

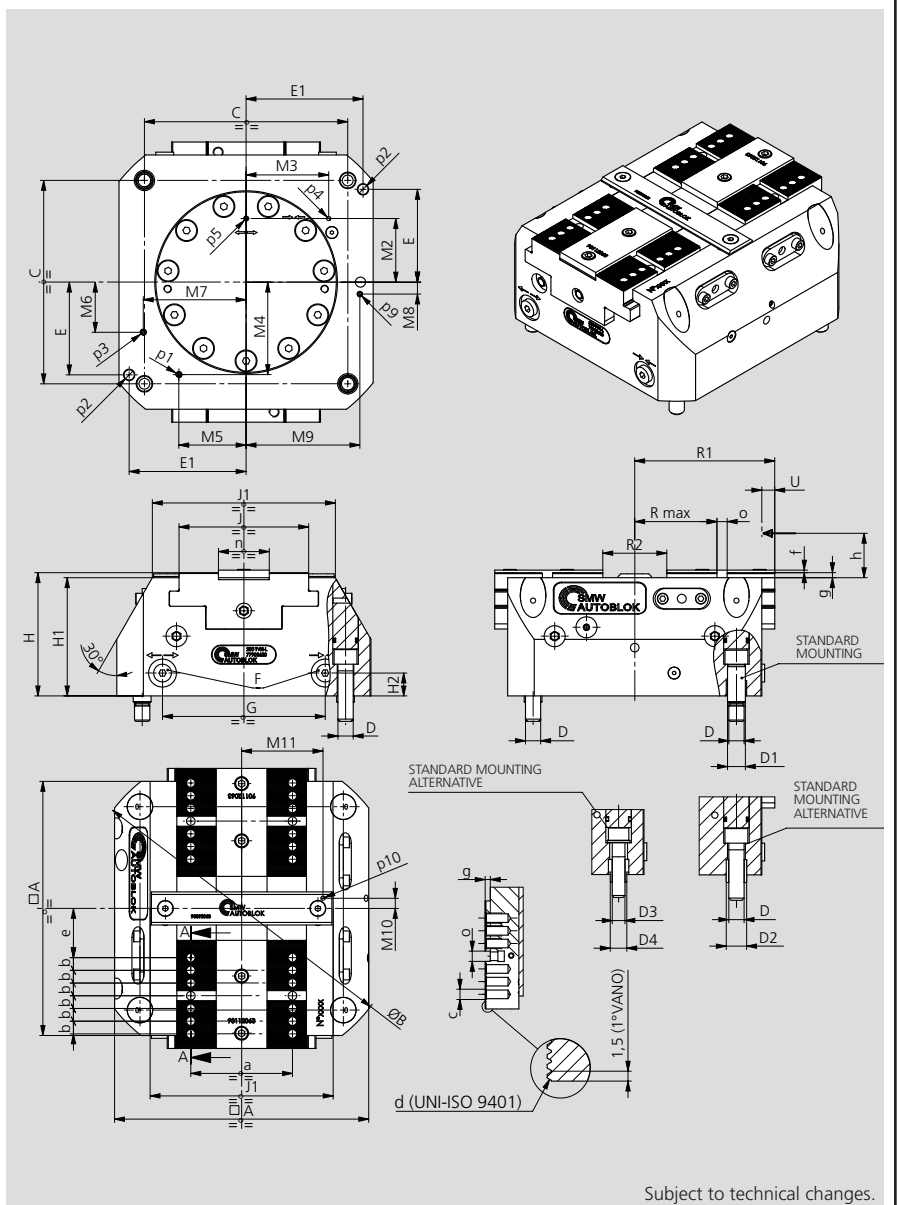
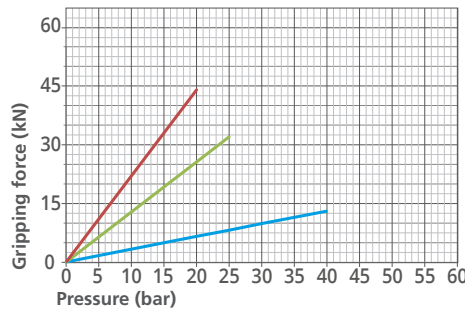
TVH-N 100 160 200



TVH-L 100 160 200



TVH-F 100 160 200

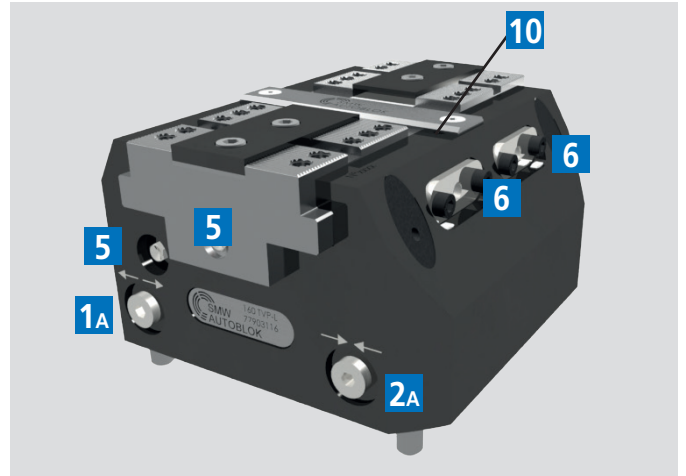
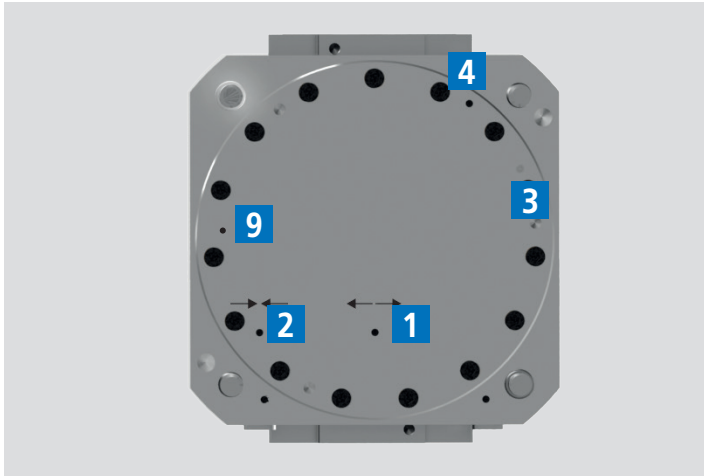


- TVH-N: Normal stroke
- TVH-L: Long stroke
- TVH-F: One fixed jaw

## HYDRAULIC TWIN VISE

Type	Id. No.	Stroke type	Max. clamping force [kN]	Stroke / jaw [mm]	Max. operating pressure [bar]	Repeatability [mm]	Weight [kg]
100 TVH-N	77903510	NORMAL	13	2.6	30	0.01	4.5
100 TVH-L	77903610	LONG	13	6	60	0.01	4.5
100 TVH-F	77903710	FIXED JAW	13	6	40	0.01	4.5
160 TVH-N	77903516	NORMAL	40	3	30	0.01	14
160 TVH-L	77903616	LONG	38	8.4	60	0.01	14
160 TVH-F	77903716	FIXED JAW	32	8.4	25	0.01	14
200 TVH-N	77903520	NORMAL	60	4.2	25	0.02	25
200 TVH-L	77903620	LONG	52	10.2	45	0.02	25
200 TVH-F	77903720	FIXED JAW	44	10.2	20	0.02	25

TVH		100	160	200
	<b>A</b>	mm	100	160
	<b>B(Ø)</b>	mm	132	205
	<b>C</b>	mm	80	125
	<b>D(Ø)</b>	mm	M8x15	M10x18
	<b>D1 (Øf7)</b>	mm	10x4	12x4
	<b>D2 (Øjs7)</b>	mm	11x4	13x6
	<b>D3</b>	mm	-	-
	<b>D4 (Øjs7)</b>	mm	-	-
	<b>E</b>	mm	32	53
	<b>E1</b>	mm	45	73
	<b>F</b>	mm	G1/8"	G1/8"
	<b>G</b>	mm	55	98
	<b>H</b>	mm	75.5	89.7
	<b>H1</b>	mm	72	86
	<b>H2</b>	mm	15	18
	<b>J</b>	mm	47	75
	<b>J1</b>	mm	72	108
	<b>M2</b>	mm	32	40
	<b>M3</b>	mm	29.5	50
	<b>M4</b>	mm	34.2	59
	<b>M5</b>	mm	27.7	41
	<b>M6</b>	mm	14.2	30.7
	<b>M7</b>	mm	41.1	62.9
	<b>M8</b>	mm	8.3	4.9
	<b>M9</b>	mm	42.7	69.8
	<b>M10</b>	mm	5	5
	<b>M11</b>	mm	34	52
Lubrication	<b>p1</b>	mm	M4	M5
	<b>p2 ØH7</b>	mm	6x14	8x14
Air purge	<b>p3</b>	mm	M4	M5
Vise closed	<b>p4</b>	mm	M4	M4
Vise open	<b>p5</b>	mm	M4	M4
Air sensing connection	<b>p9</b>	mm	M4	M5
Air sensing outlet	<b>p10</b>	mm	M4	M4
Min. / max. (long stroke)	<b>R2</b>	mm	20 / 32	26 / 42.8
Min. / max. (long stroke)	<b>R1</b>	mm	50 / 56	82.5 / 90.9
Min. / max. (long stroke)	<b>Rmax</b>	mm	25.6 / 31.6	44.8 / 53.2
Min. / max. (normal stroke)	<b>R2</b>	mm	19.8 / 25	26 / 32
Min. / max. (normal stroke)	<b>R1</b>	mm	47.4 / 50	82.5 / 85.5
Min. / max. (normal stroke)	<b>Rmax</b>	mm	25.4 / 28	45 / 48
Min. / max. (fixed jaw)	<b>R2</b>	mm	20 / 26	26 / 34.4
Min. / max. (fixed jaw)	<b>R1</b>	mm	50 / 56	82.5 / 90.9
Min. / max. (fixed jaw)	<b>Rmax</b>	mm	25.6 / 31.6	44.8 / 53.2
Long stroke	<b>U</b>	mm	6	8.4
Normal stroke	<b>U</b>	mm	2.6	3
Fixed jaw stroke	<b>U</b>	mm	6	8.4
	<b>a</b>	mm	35	60
	<b>b</b>	mm	7	10
	<b>c</b>	mm	M6x10	M8x12
Serration	<b>d</b>	mm	1.5 x 60°	1.5 x 60°
Min. / max. (normal stroke)	<b>e</b>	mm	14.4 / 17	19 / 22
Min. / max. (long stroke)	<b>e</b>	mm	14.6 / 20.6	18.8 / 27.2
Min. / max. (fixed jaw)	<b>e</b>	mm	14.6 / 20.6	18.8 / 27.2
	<b>f</b>	mm	1.8	1.8
	<b>g</b>	mm	2.7	3.2
	<b>h</b>	mm	16	25
	<b>o (H7)</b>	mm	6	8
	<b>n (g6)</b>	mm	20	32

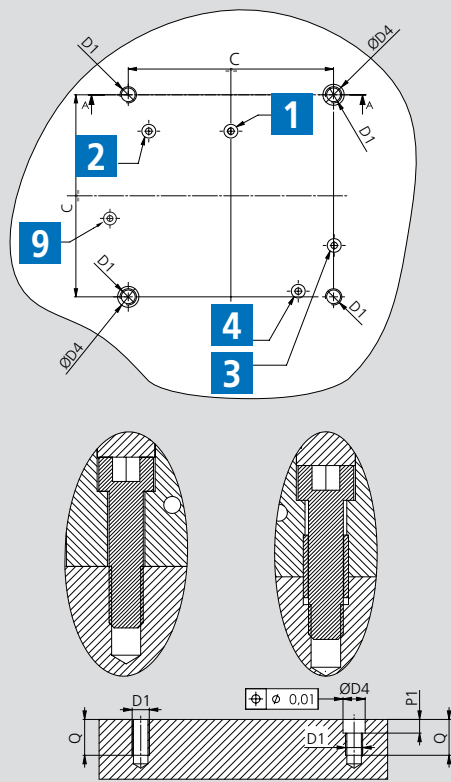
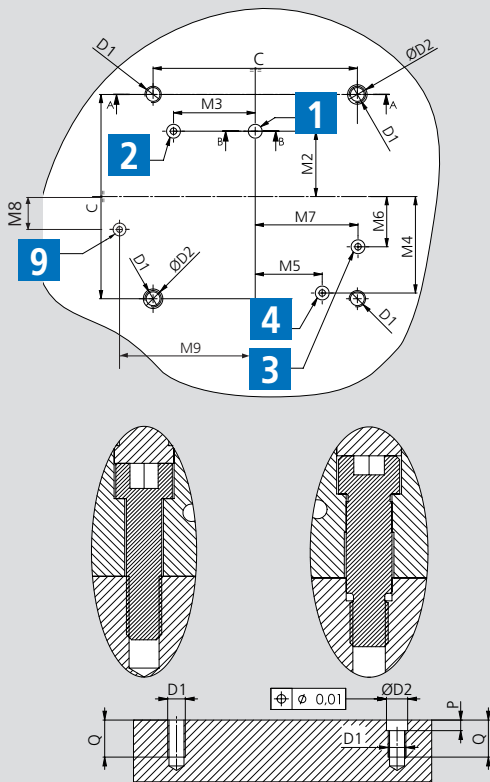


### SOLUTION 1 STANDARD

± 0.03 mm to clamping center

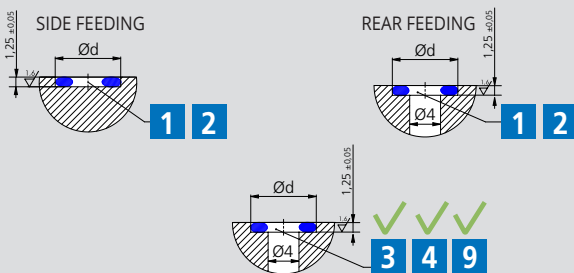
### SOLUTION 2 STANDARD

± 0.025 mm to clamping center



**ALL BOLTS AND CENTERING BUSHINGS INCLUDED**

### FEEDING SEATS: OBLIGATED EXECUTION



- 1** Open-Rear feeding
- 2** Closed-Rear feeding
- 3** Air purge
- 1A** Open-Side feeding
- 2A** Closed-Side feeding
- 4** Central lubrication
- 5** Lubrication fitting
- 6** Proximity switches seats
- 9** Air sensing connection
- 10** Air sensing outlet

TV	C	D1	D2H7	D4H7	M	M1	M2	M3	M4	M5	M6	M7	M8	M9	P	P1	Q	V	Z	Ød	OR
100	80	M8	10	11	45	29	32	29.5	34.2	27.7	14.2	41.1	8.3	42.7	6	6	18	37.3	96.5	8	OR2018
160	125	M10	12	13	69	48	40	50	59	41	30.7	62.9	4.9	69.8	6	7	21	50	155	8	OR2018
200	160	M12	14	16	88	62	50	65	72.8	52.9	39.5	80.9	9.4	89.5	7	7	24	62	195	8.8	OR2021
250	200	M12	14	16	113	77	64	75	89.8	65.2	48.6	99.8	11.6	110.4	7	7	24	80	239	8.8	OR2021
315	250	M15	18	21	-	-	80	90	115.7	84	62.7	128.5	12.4	141.5	8	7	27	-	-	8.8	OR2021