

**01 - 02.6**

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**Shut-off valves LDM  
UV 116 and UV 216**



# UV 116 UV 216



## Shut-off valves DN 15 - 300, PN 16 and 25 with hand wheel

### Description

Shut-off valves UV 116, UV 216 are designed to close the medium flow. The valves excel with high tightness and its compact construction. The valves are equipped with back seat enabling the packing replacing during the valve operating with the valve fully open.

### Application

The valves are designed for heating and other industries especially in hot-water applications and UV 216 even in steam applications. The wide range of diameter nominal enable the valve to be used from the minimum flow rates (eg. sampling valves), to the highest flow rates in main pipes.

### Process media

The valves are suitable for water, steam (UV 216 only), air and other neutral media compatible with material of the valve body and its inner parts.

### Installation

The valves can be piped in any position but a necessary space for operating the hand wheel shall be kept. The flow direction is indicated with the arrows on the valve body. Reverse (alternate) flow is permissible with limited values of differential pressure.

### Technical data

Series	UV 116	UV 216
Execution	Shut-off valve, straight-through	
Nominal diameter range	DN 15 to 300	DN 15 to 200
Nominal pressure	PN 16	PN 25
Body material	Grey cast iron EN-JL1040	Spheroidal cast iron EN-JS1025
Plug material	Stainless steel 1.4021	
Seat material	Stainless steel 1.4006	
Stem material	Stainless steel 1.4021	
Packing	Graphite	
Operating temp. range	+2 to +300°C	+2 to +350°C
Connection	Type B1 (raised faced flange) acc. to ČSN-EN 1092-2 (1/1999) Face to face dimensions acc. to ČSN-EN 558-1 (3/1997), section 1	
Type of plug	Disc plug, pressure-balanced for DN 200 to 300	
Flow characteristic	On-off	
Leakage rate	Acc. to DIN 3230 (4/1982) - leakage rate class BN1	

### Kvs, differential pressure values and loss coefficient $\zeta$ (zeta)

DN	Kvs [m <sup>3</sup> /h]	$\zeta$	$\Delta p_{\max}$ MPa PN16	$\Delta p_{\max}$ MPa PN25	$\Delta p_z$ MPa PN16,25
15	5.9	2.3	1.60	2.50	1.60
20	7.4	4.7	1.60	2.50	1.60
25	13.0	3.7	1.60	2.50	1.60
32	18.0	5.2	1.60	2.50	1.60
40	30.0	4.5	1.60	2.50	1.60
50	41.0	5.9	1.60	2.50	1.60
65	79.0	4.6	1.60	2.50	1.60
80	115.0	4.9	1.60	2.50	1.60
100	181.0	4.9	1.60	2.50	1.60
125	225.0	7.7	1.60	2.50	1.60
150	364.0	6.1	1.60	2.10	1.60
200	690.0	5.4	1.40	1.40	1.00
250	1010.0	6.1	1.60	---	0.60
300	1460.0	6.1	1.60	---	0.40

$\Delta p_{\max}$  - max. differential pressure value for normal flow direction  
 $\Delta p_z$  - max. differential pressure value for reverse flow direction

### Max. permissible pressure values [MPa]

Material	PN	Temperature [°C]					
		120	150	200	250	300	350
Grey cast iron EN-JL1040 (EN-GJL-250)	16	1,60	1,44	1,28	1,12	0,96	---
Spheroidal cast iron EN-JL1025 (EN-GJS-400-18-LT)	25	2,50	2,43	2,30	2,18	2,00	1,75

## Specification code for ordering shut-off valves UV 116 and UV 216

		XX	XXX	X	XX	XX	/	XXX	-	XXX
1. Type of valve	Shut-off valve	UV								
2. Series	Shut-off valve with grey cast iron EN-JL1040		116							
	Shut-off valve with spheroidal cast iron EN-JS1025		216							
3. Type of actuating / packing	Hand wheel / graphite			S						
4. Connection	Flange with raised faced flange				1					
5. Body / bonnet material	Grey cast iron EN-JL1040		116		3					
	Spheroidal cast iron EN-JS1025		216		4					
6. Nominal pressure	PN 16		116			16				
	PN 25		216			25				
7. Max. operating temp. °C	300°C		116					300		
	350°C		216					350		
8. Nominal diameter	DN 15 to 300		116						XXX	
	DN 15 to 200		216						XXX	

### Order example : UV 216 S14 25/350-65

The valves can be also ordered under their simplified codes:

**Example:** UV 116S DN 25 stands for shut-off valve PN 16, DN 25

UV 216S DN 65 stands for shut-off valve PN 25, DN 65

## Dimensions and weights for UV x16

DN	PN 16				PN 25				PN 16, PN 25									
	Dz	Dp	Do	n	d	g	Dz	Dp	Do	n	d	g	f	L	H	h	m	
	mm	mm	mm		mm	mm	mm	mm	mm		mm	mm	mm	mm	mm	mm	mm	kg
15	95	46	65	4	14	14	95	46	65	4	14	14	2	130	167	5	3,3	
20	105	56	75			16	105	56	75			16		150	167	5	3,9	
25	115	65	85			16	115	65	85			16		160	175	8	5,0	
32	140	76	100			18	140	76	100			18		180	186	9	6,6	
40	150	84	110	8	19	18	150	84	110	8	19	19	3	200	235	12	8,4	
50	165	99	125			20	165	99	125			19		230	248	13	12,0	
65	185	118	145			20	185	118	145			19		290	260	16	17,3	
80	200	132	160			22	200	132	160			19		310	291	20	22,7	
100	220	156	180	12	23	24	235	156	190	12	23	19	4	350	338	25	35,8	
125	250	184	210			26	270	184	220			19		400	384	32	52,8	
150	285	211	240			26	300	211	250			20		480	429	38	74,2	
200	340	266	295			30	360	274	310			22		600	529	50	126	
250	405	319	355	12	28	32	---	---	---	12	28	---	4	730	638	62	200	
300	460	370	410			32	---	---	---			---		850	710	100	315	

