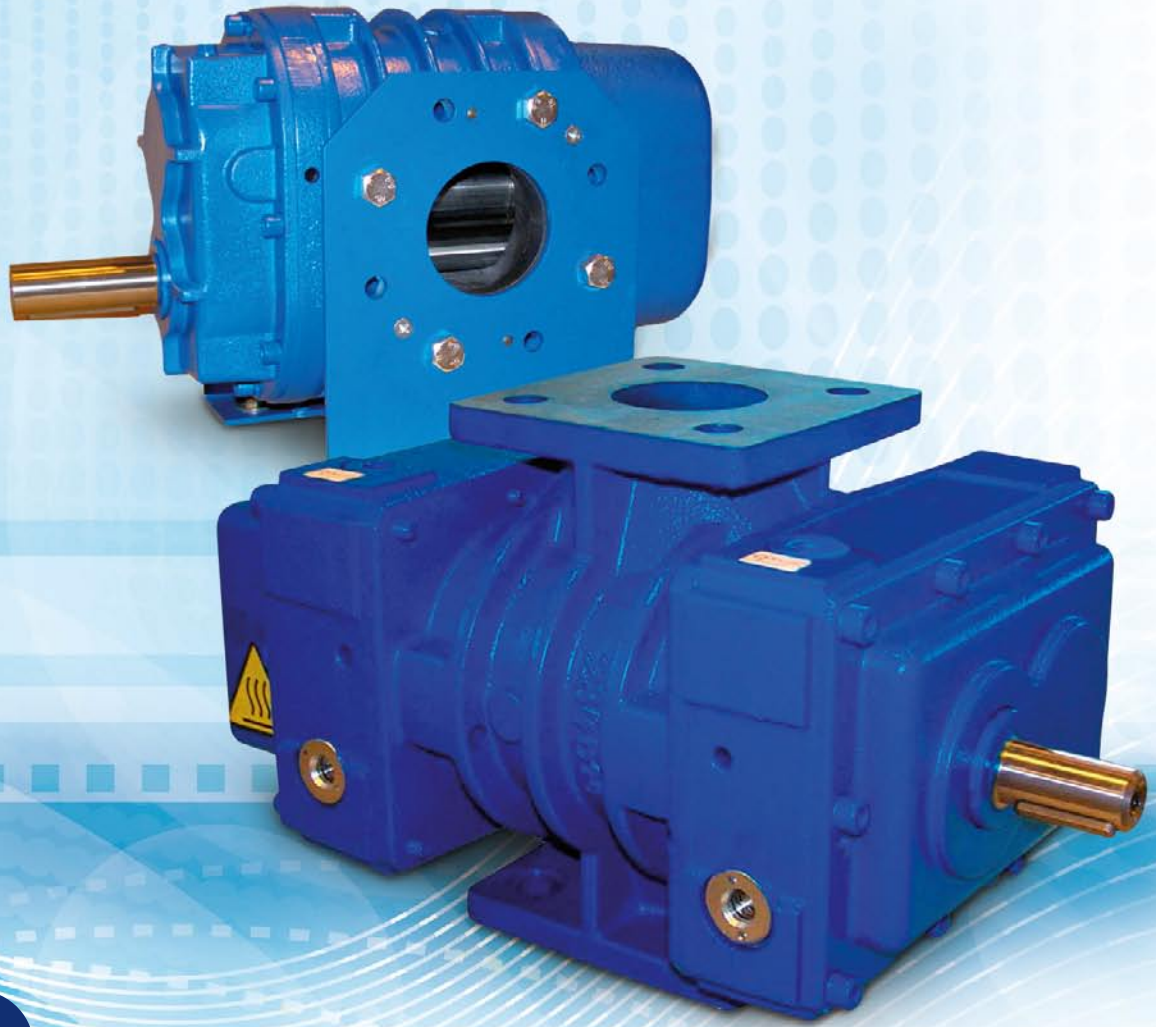
Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Киргизия (996)312-96-26-47
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Казахстан (772)734-952-31
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Россия (495)268-04-70
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

**https://lutos.nt-rt.ru/ || tus@nt-rt.ru**



# CATALOGUE OF P.D. BARE SHAFT BLOWERS
# KATALOG ROOTSOVÝCH DMYCHADEL

## ROOTS'S BLOWERS IN STANDARD DESIGN

**Description:** LUTOS Roots's blowers operate on the principle of oil-free gas transport. The rotor rotation axes are parallel and their movements are linked with a synchronizing gear mechanism with identical numbers of teeth of both gears. The synchronizing gear mechanism ensures contactless rotor rolling, the rotors are turning against one another. Suction and delivery outlets are positioned between the rotor axes. Gas is transported with the blower without pressure increasing, it is compressed in the delivery outlet by action of gas delivered already before (blowers with external compression).
In case of the standard design, rotor labyrinth box that are not subjected to wear are used. Overpressure and underpressure arising in individual parts of the box loop are equalized in its centre that is, moreover, connected with a drilled bore with ambient atmosphere. For that reason, air blowing from drilled bores is normal and its intensity depends on backlash in the boxes. If oil is taken together with oil when blowing, it may indicate a defect of bearing or excessive quantity of oil. As the labyrinth boxes do not guarantee absolute tightness of the blower, it is necessary for the oil level in covers not to exceed the specified limit.

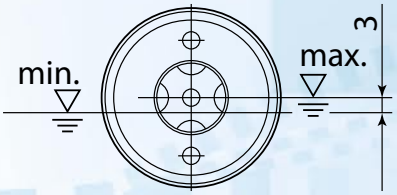
**In order to avoid lubricating oil leakage at transport and blower handling, oil should be filled only before machine starting.**

**Approximate quantities of oil fillings for blowers are listed in the tables below:**

| Standard | | | |
|---|---|---|---|
| Type | Cover 1 (litres) | Cover 2 (litres) | Total (litres) |
| DI 4P/R | 0.000 | 0.080 | 0.080 |
| DI 6 | 0.045 | 0.116 | 0.161 |
| DI 10 | 0.036 | 0.082 | 0.118 |
| DI 20 | 0.070 | 0.150 | 0.220 |
| DI 30/40 | 0.110 | 0.190 | 0.300 |
| DI 50/60 | 0.220 | 0.430 | 0.650 |
| DI 65/66 | 0.510 | 1.050 | 1.560 |
| DI 70 | 1.350 | 2.160 | 3.510 |
| DI 90 | 1.670 | 2.920 | 4.590 |
| DI 100/110/120 | 5.500 | 6.000 | 11.50 |

| Horizontal | | | |
|---|---|---|---|
| Type | Cover 1 (litres) | Cover 2 (litres) | Total (litres) |
| DI 6 H | 0.040 | 0.074 | 0.114 |
| DI 10 H | 0.026 | 0.050 | 0.076 |
| DI 20 H | 0.064 | 0.110 | 0.174 |
| DI 30/40 H | 0.070 | 0.100 | 0.170 |
| DI 50/60 H | 0.230 | 0.530 | 0.760 |

**The real level of oil fillings reaches to the centre or slightly under the centre of the level indicator as illustrated by the figure below.**




| Oil type: fully synthetic | | |
|---|---|---|
| Oil | Manufacturer (agency) | Distributor |
| MOBIL SPECIAL X<br>5W-40<br>Viskozita ASTM D 445<br>API SL/SJ/CF<br>ACEA A3, B3, B4 | Exxon Mobil Lubricants & Specialities Europe<br>Division of Exxon Mobil<br>Petroleum & Chemical<br>Polderdijkwes 3<br>B-2030 Antwerpen, Belgium | ESSO spol. s r.o.<br>Divize maziva<br>Na Pankráci 1685/19<br>140 21 Praha 4 |

Use of other oils (e.g. for applications in food processing industry) should be consulted with the manufacturer of the blower. Maximum temperature of oil fillings should not exceed 120 °C. Standard stabilization of bearings in the blower is linked with such temperature.

### Limit temperatures for blowers:

Lower limit of ambient temperature at which the machine set can be operated in a stable way is – 20 °C. The machine set can be operated for short periods at temperature as low as– 30 °C. Maximum temperature of medium in the delivery of the standard blower amounts to 140 °C. In order to avoid exceeding this limit value in the delivery even at maximum medium compression, it is necessary to ensure medium suction temperature lower than 40 °C.

**Blower drive:** The blower can be driven with an electric motor or another power source.
**Use:** The blowers are used to transport and compress gas in vertical or in horizontal positions. With respect to the fact that there is not contact between the rotors and the box, transported medium is not contaminated with abrasion or oil during transport.

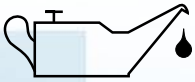
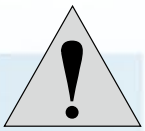
**Operational medium:** Air or non-aggressive gases. If the blowers are to be used in an environment with risk of explosion and for work with gases with increased moisture contents or with aggressive gases, the blowers designed and manufactured specifically for such purposes should be used.

**WARNING!**
The blowers of the standard design cannot be used in environments with risk of explosion!

## Application:

**Waste water treatment plants** (increasing of oxygen quantity in water, keeping bacteria in uplift, ventilation of activation tanks or sand traps in waste water treatment plants)
**Pneumatic transport** (transport of all types of bulk materials, granules, materials with different grain sizes)
**Various** (backwash of filters in drinking water treatment plants, unblocking of silos (bunkers), clarification of bulk materials and mixtures, underpressure transport, air exhaustion from various technologies up to max. underpressure of –50 kPa, supply of technological air up to max. overpressure of 100 kPa).

### Warning labels on blowers:


### Type label:


## Standard maintenance, inspections

| Operational hours | Inspection | Lubrication |
|---|---|---|
| **After 400 hours** | Check of blower operation<br>In dry continental climate, preserve rotors and cylinders within 6 weeks of idle time, in case of wet climate, perform this operation sooner. | Inspection of oil bath levels<br>The first oil replacement upon commissioning |
| **After 4,000 2) hours** | | Inspection of operation of lubricating disks (level oscillates slightly) |
| | | Oil replacement |
| **After 20,0001) hours** | Measurement of intensity of vibrations (bearings) | |
| **After 40,0001) hours** | Inspection of bearings by measuring intensity of vibrations, replacement of bearings is assumed | Oil replacement |

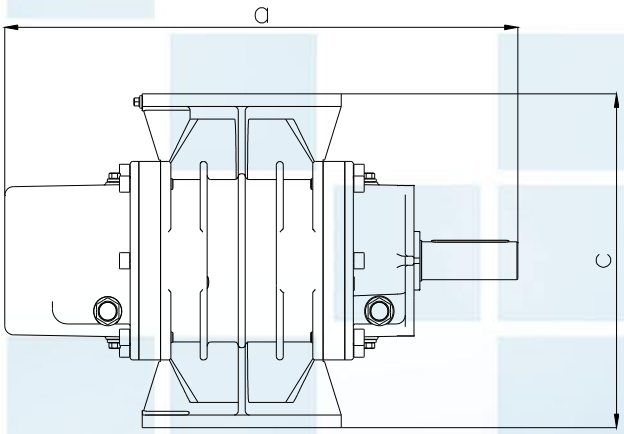
*Notes:*
*1) To be carried out specialized service*
*2) Interval of oil replacement depends on operational temperature of oil bath (indirectly upon input and output temperatures of transported air). If oil temperature does not exceed 50 °C, oil can be replaced once a year (after 8,000 hours). If temperature exceeds 100 °C, oil replacement should be carried out four times a year (after 2,000 hours), in case of temperature of 120 °C, oil should be replaced each month. Dark or thick oil indicates contamination or start of carbonisation, i.e. necessity of its replacement. Execution of analysis of a sample is more reliable indication.*

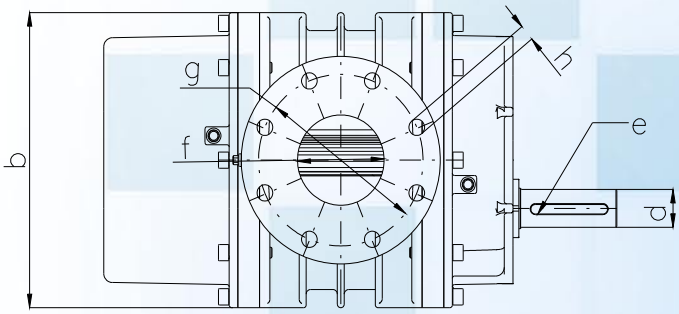
## Information on unacceptable method of use

– Standard blowers may not operate with reverse direction of turning.
– Standard blowers may not be stressed with excessive pressure, maximum acceptable compression ratio equals to 2.
– Standard blowers may not be stressed with excessive temperatures.

**WARNING**
It is unacceptable to aim a stream of cool air at any of the parts of blower box! Thermal deformation occurs by effect of local cooling – there is a risk of blower destruction.

## BLOWER DIMENSIONS:

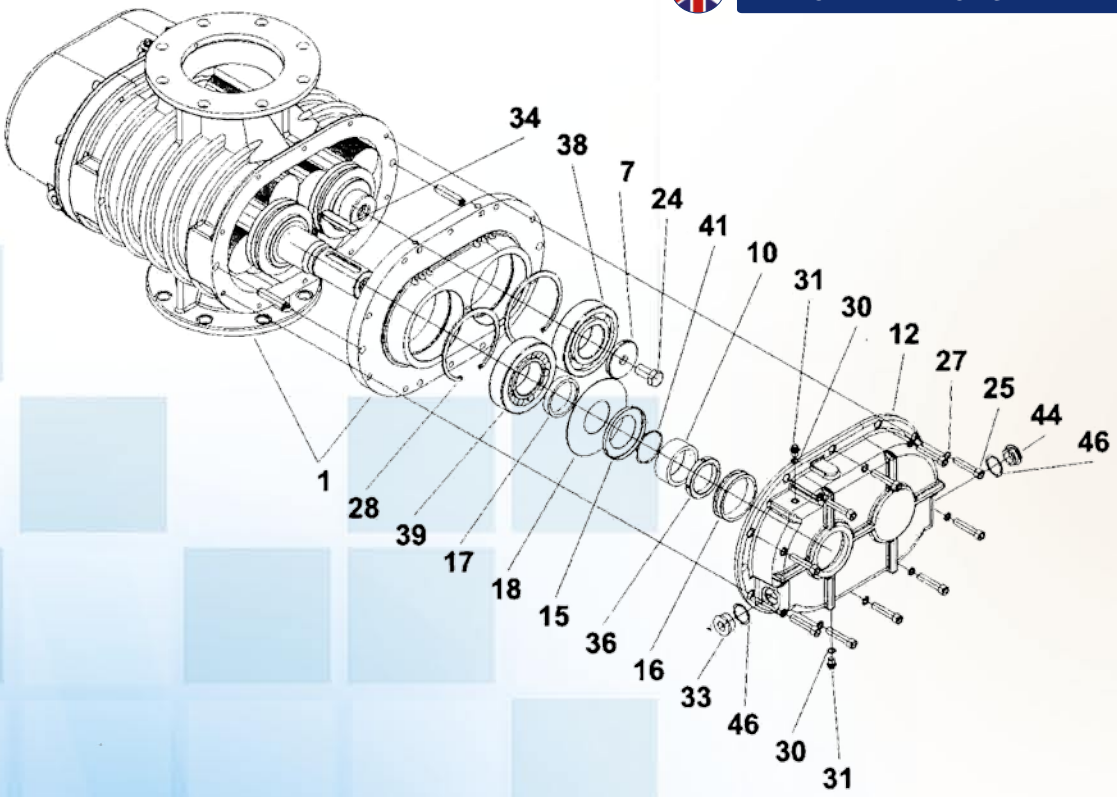


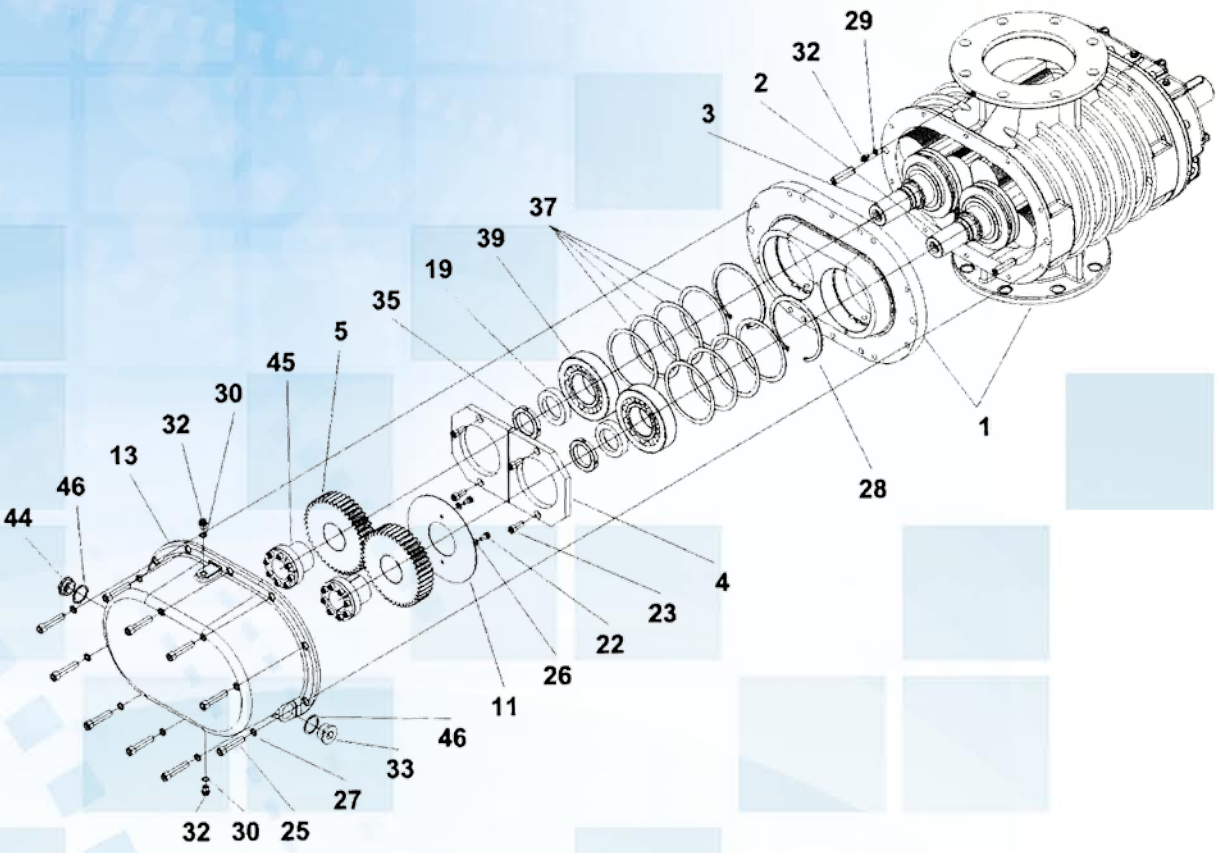




| Type | a | b | c | d | e | f | g | h |
|---|---|---|---|---|---|---|---|---|
| DI6 | 307 | 172 | Approx. 185 | Ø18 | 6h9×6×22 | Ø50 | Ø100 | 4×Ø11 |
| DI10 | 382 | 214 | Approx. 228 | Ø24 | 8h9×7×40 | Ø50 | Ø135 | 4×Ø17 |
| DI20 | 418 | 214 | Approx. 228 | Ø24 | 8h9×7×40 | Ø65 | Ø135 | 4×Ø18 |
| DI30 | 463 | 271 | Approx. 320 | Ø32 | 10h9×8×56 | Ø80 | Ø156 | 4×Ø18 |
| DI40 | 518 | 271 | Approx. 320 | Ø32 | 10h9×8×56 | Ø80 | Ø156 | 4×Ø18 |
| DI50 | 595 | 327 | Approx. 370 | Ø42 | 12h9×8×90 | Ø100 | Ø190 | 8×Ø18 |
| DI60 | 653 | 327 | Approx. 370 | Ø42 | 12h9×8×90 | Ø100 | Ø190 | 8×Ø18 |
| DI65 | 711 | 400 | Approx. 370 | Ø50 | 14h9×9×80 | Ø150 | Ø240 | 8×Ø23 |
| DI66 | 764 | 400 | Approx. 450 | Ø50 | 14h9×9×80 | Ø150 | Ø240 | 8×Ø23 |
| DI70 | 858 | 512 | Approx. 524 | Ø60 | 18h9×11×90 | Ø200 | Ø296 | 8×Ø24 |
| DI90 | 1018 | 585 | Approx. 520 | Ø80 | 22h9×14×100 | Ø250 | Ø356 | 12×M20 |
| DI100 | 1098 | 790 | Approx. 718 | Ø85 | 22h9×14×140 | Ø250 | Ø356 | 12×Ø24 |
| DI110 | 1317 | 790 | Approx. 718 | Ø85 | 22h9×14×140 | Ø250 | Ø356 | 12×Ø24 |
| DI120 | 1317 | 790 | Approx. 718 | Ø85 | 22h9×14×140 | Ø300 | Ø400 | 12×Ø24 |

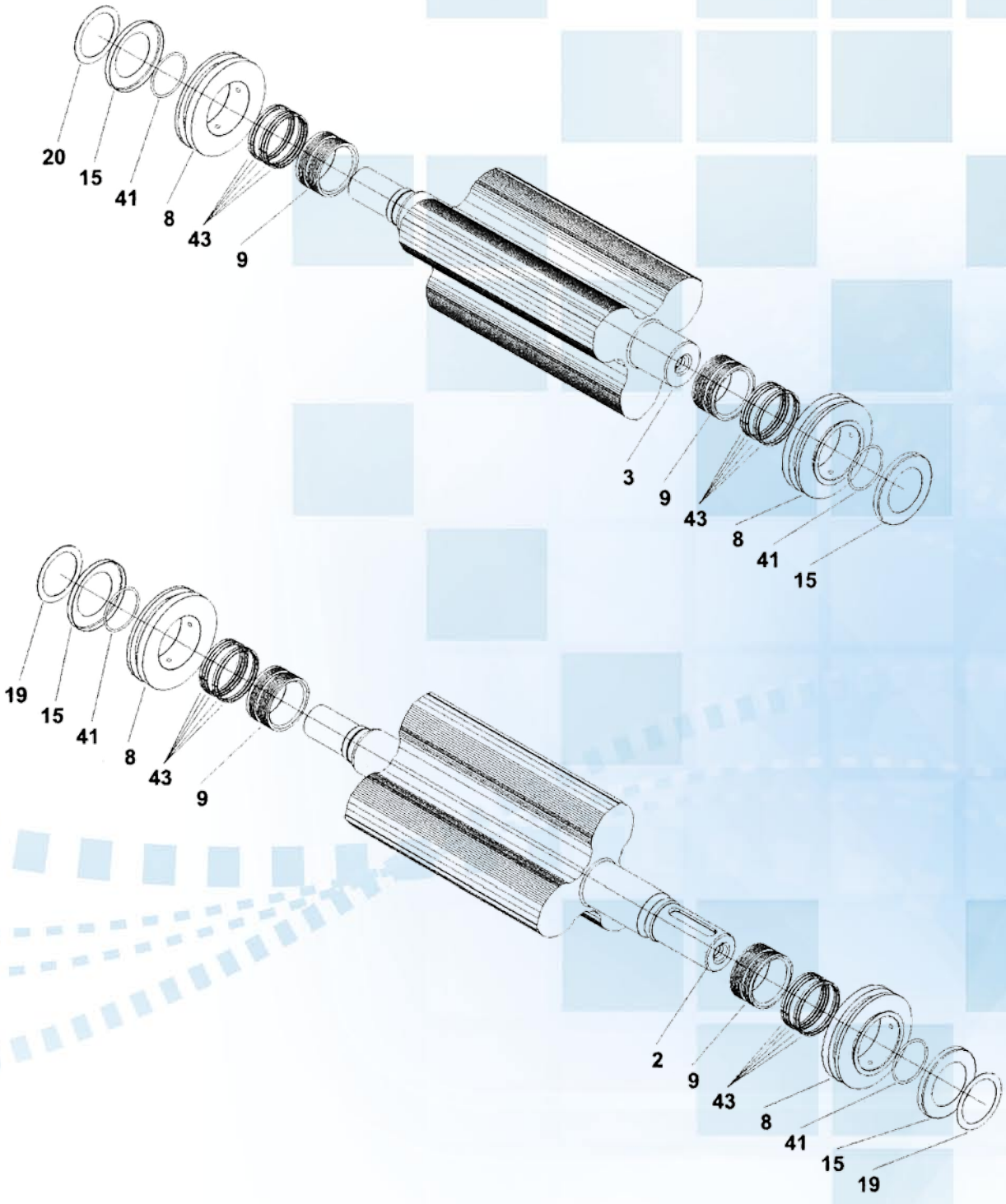
| Basic material | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DI6 | DI10 | DI20 | DI30 | DI40 | DI50 | DI60 | DI65 | DI66 | DI70 | DI90 | DI100 | DI110 | DI120 |
| Rotors | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 |
| Box | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 250 | GJL 250 | GJL 250 | GJL 250 |
| Covers | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C |
| Gears | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B |
| Weight | 25 | 39 | 56 | 68 | 79 | 116 | 133 | 211 | 252 | 410 | 637 | 905 | 1121 | 1192 |

## EXPLODED VIEW OF SPARE PARTS:



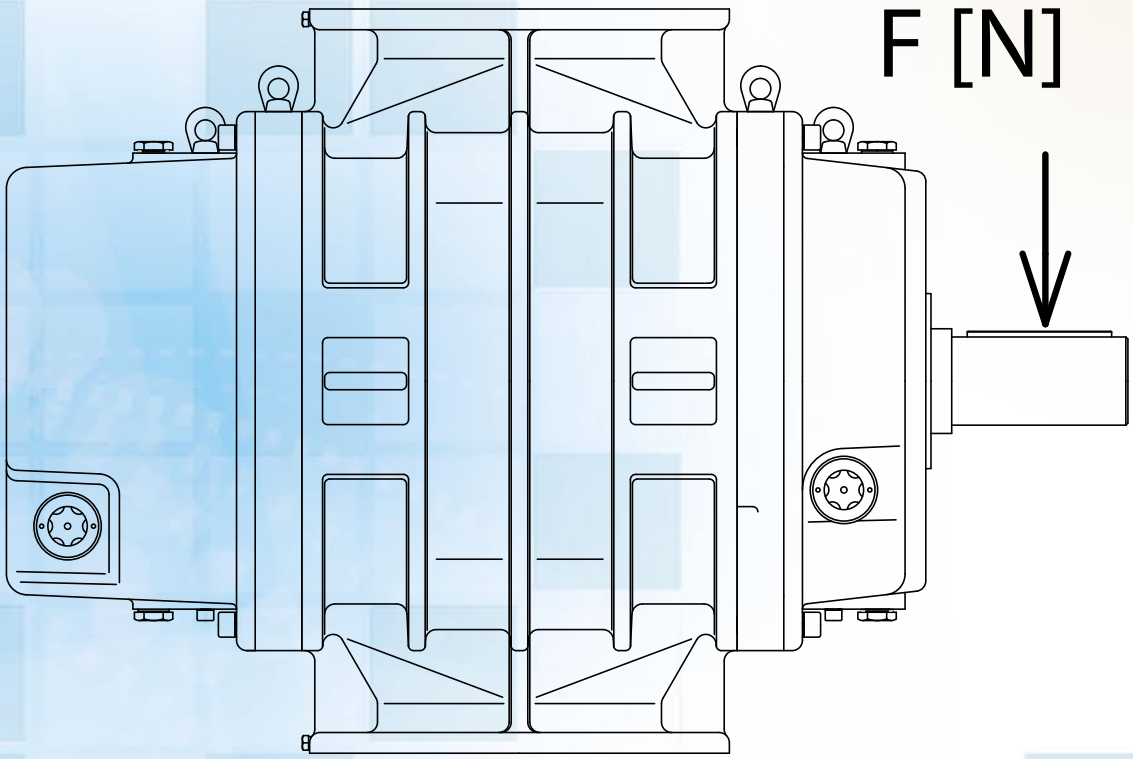
## EXPLODED VIEW OF SPARE PARTS:



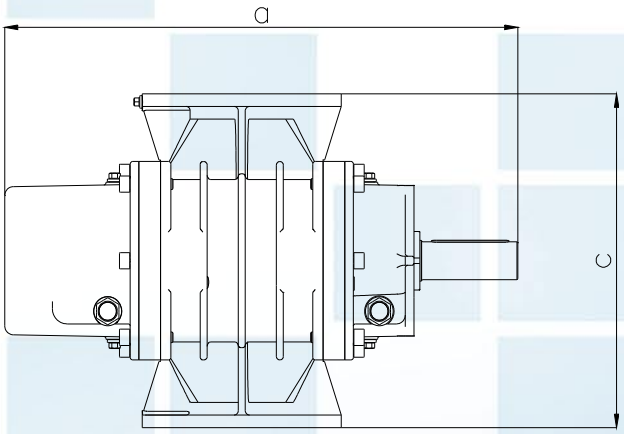
**Explanation:**

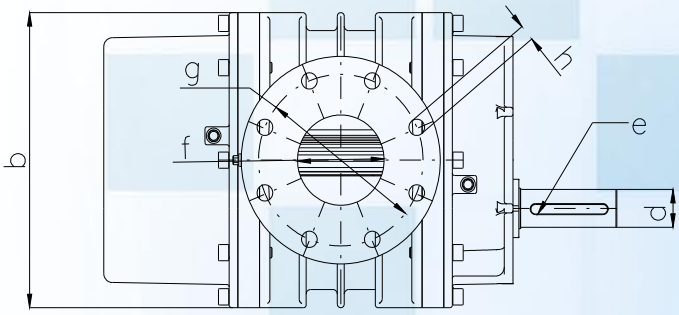
Qs min. [$m^3.h^{-1}$] – minimum capacity of blower packages
Qs max. [$m^3.h^{-1}$] – maximum capacity of blower packages
pressure [kPa]
capacity [$m^3.h^{-1}$]

| Type of blower | DI4 | DI6 | DI10 | DI20 | DI30 | DI40 | DI50 | DI60 | DI65 | DI66 | DI70 | DI90 | DI100 | DI110 | DI120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum cantilever forces F [N] | 100 | 150 | 650 | 600 | 1200 | 1100 | 1900 | 1800 | 1950 | 2300 | 3400 | 6000 | 7800 | 7500 | 7500 |



## ROZMĚRY DMYCHADEL:

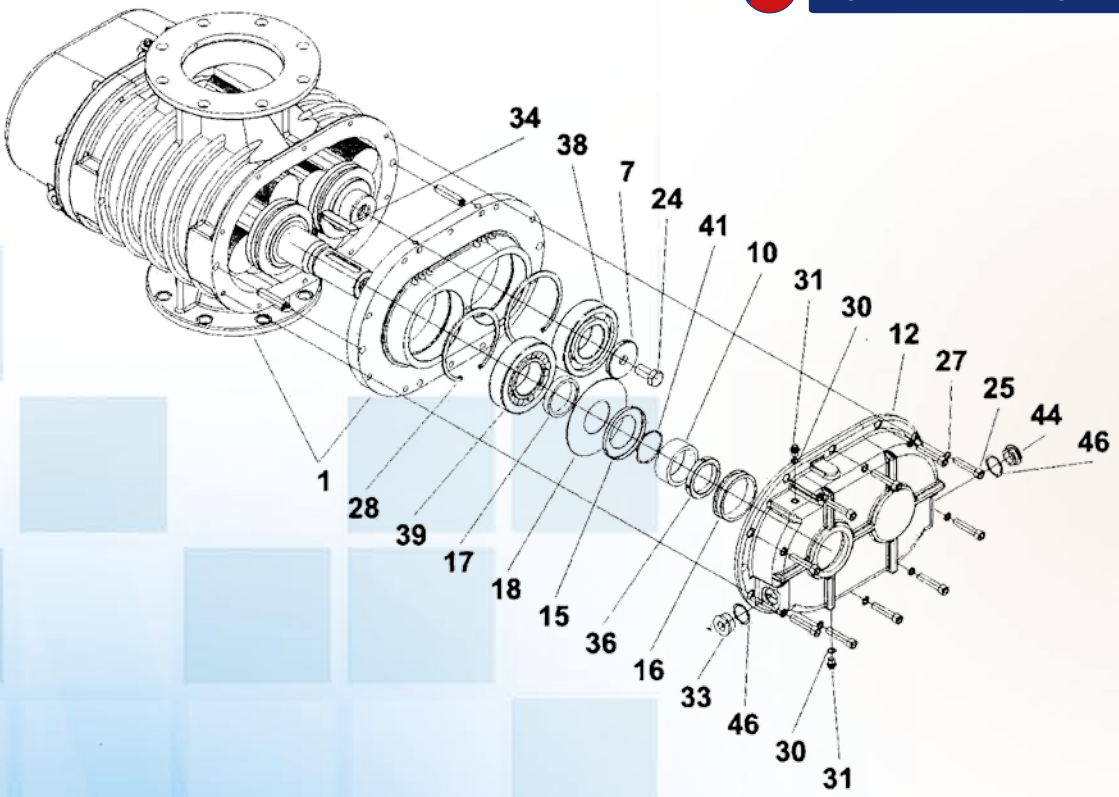


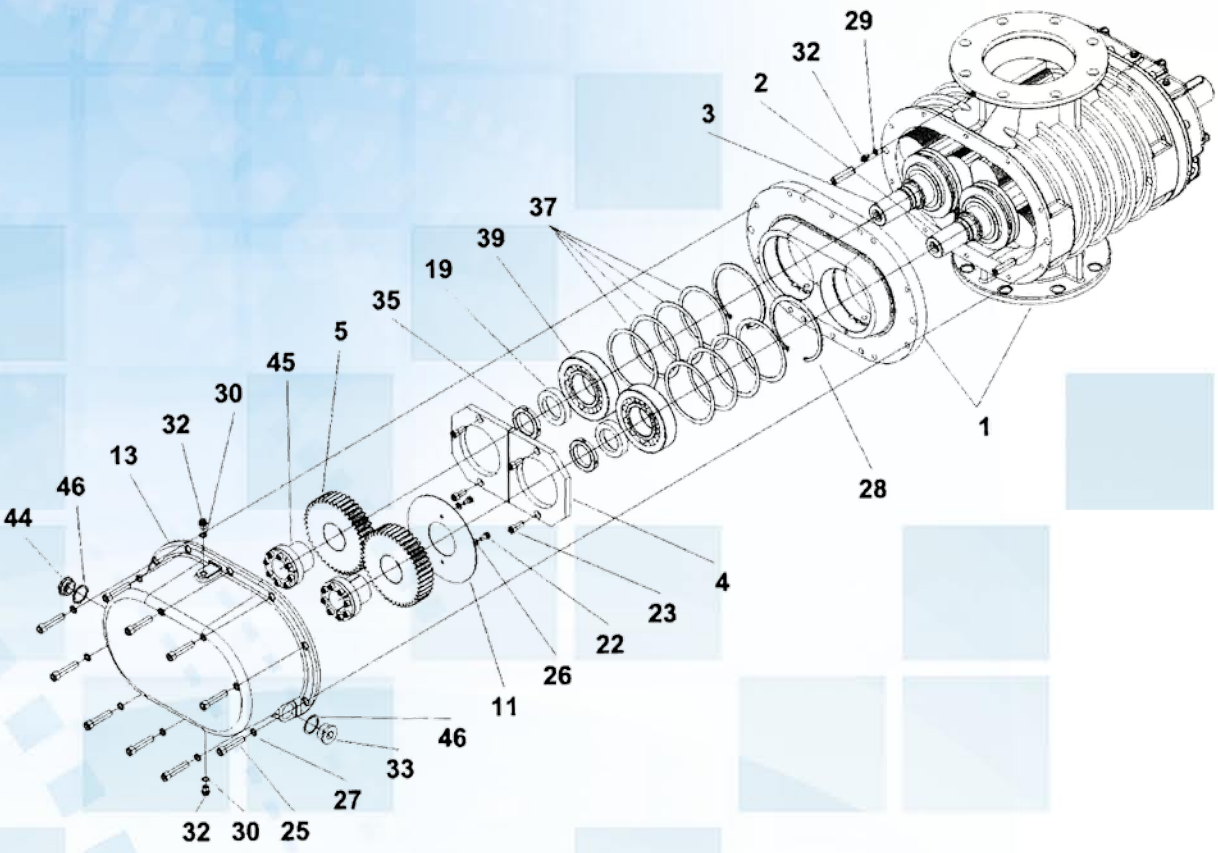




| Type | a | b | c | d | e | f | g | h |
|---|---|---|---|---|---|---|---|---|
| DI6 | 307 | 172 | ca. 185 | Ø18 | 6h9×6×22 | Ø50 | Ø100 | 4×Ø11 |
| DI10 | 382 | 214 | ca. 228 | Ø24 | 8h9×7×40 | Ø50 | Ø135 | 4×Ø17 |
| DI20 | 418 | 214 | ca. 228 | Ø24 | 8h9×7×40 | Ø65 | Ø135 | 4×Ø18 |
| DI30 | 463 | 271 | ca. 320 | Ø32 | 10h9×8×56 | Ø80 | Ø156 | 4×Ø18 |
| DI40 | 518 | 271 | ca. 320 | Ø32 | 10h9×8×56 | Ø80 | Ø156 | 4×Ø18 |
| DI50 | 595 | 327 | ca. 370 | Ø42 | 12h9×8×90 | Ø100 | Ø190 | 8×Ø18 |
| DI60 | 653 | 327 | ca. 370 | Ø42 | 12h9×8×90 | Ø100 | Ø190 | 8×Ø18 |
| DI65 | 711 | 400 | ca. 370 | Ø50 | 14h9×9×80 | Ø150 | Ø240 | 8×Ø23 |
| DI66 | 764 | 400 | ca. 450 | Ø50 | 14h9×9×80 | Ø150 | Ø240 | 8×Ø23 |
| DI70 | 858 | 512 | ca. 524 | Ø60 | 18h9×11×90 | Ø200 | Ø296 | 8×Ø24 |
| DI90 | 1018 | 585 | ca. 520 | Ø80 | 22h9×14×100 | Ø250 | Ø356 | 12×M20 |
| DI100 | 1098 | 790 | ca. 718 | Ø85 | 22h9×14×140 | Ø250 | Ø356 | 12×Ø24 |
| DI110 | 1317 | 790 | ca. 718 | Ø85 | 22h9×14×140 | Ø250 | Ø356 | 12×Ø24 |
| DI120 | 1317 | 790 | ca. 718 | Ø85 | 22h9×14×140 | Ø300 | Ø400 | 12×Ø24 |

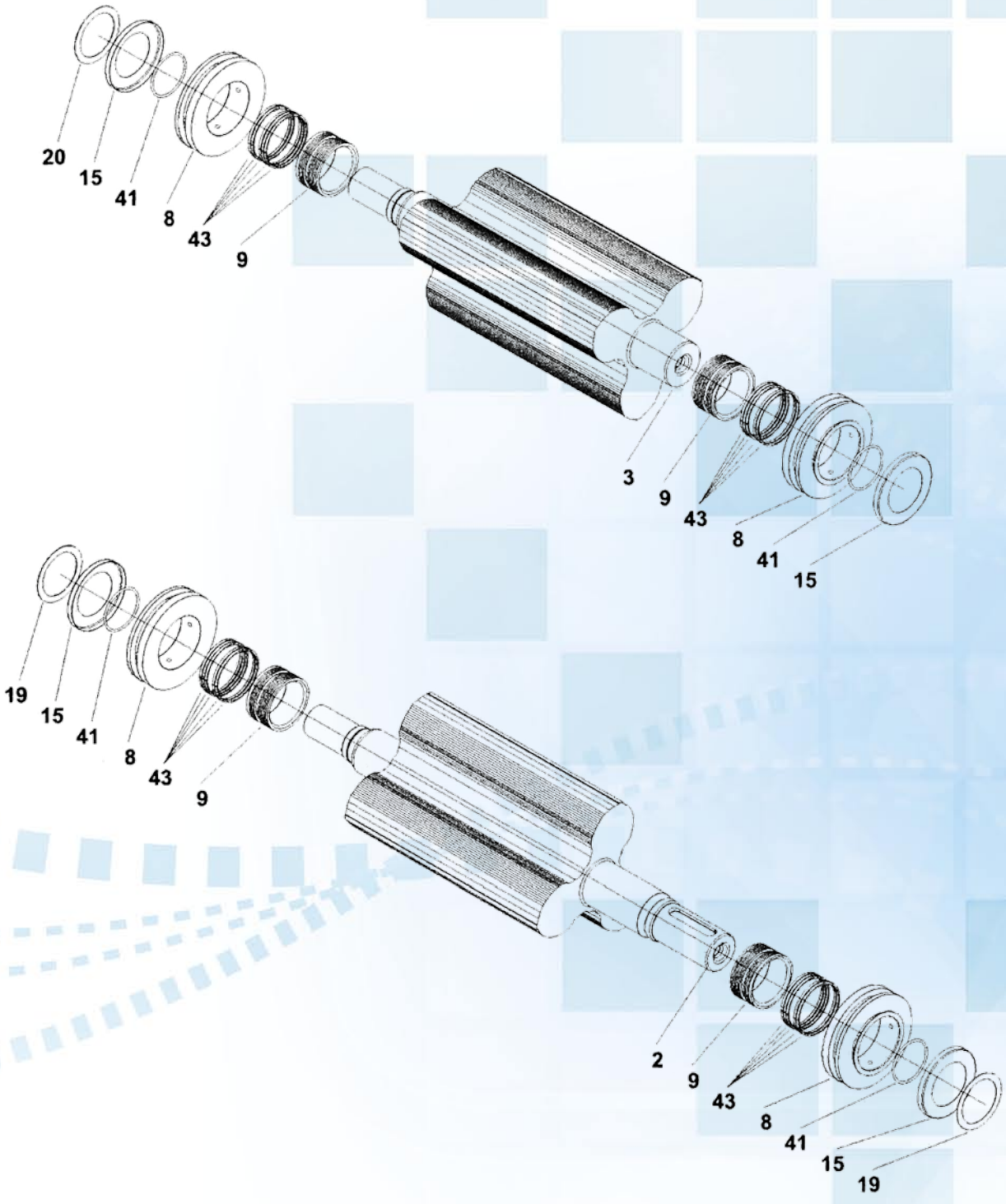
| Výchozí materiál | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DI6 | DI10 | DI20 | DI30 | DI40 | DI50 | DI60 | DI65 | DI66 | DI70 | DI90 | DI100 | DI110 | DI120 |
| Rotory | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 | GJS 500-7 |
| Skříň | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 200 | GJL 250 | GJL 250 | GJL 250 | GJL 250 |
| Víka | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C | GSL 200C |
| Kola | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B | 14220 AT.3.1B |
| Hmotnost | 25 | 39 | 56 | 68 | 79 | 116 | 133 | 211 | 252 | 410 | 637 | 905 | 1121 | 1192 |

## ROZPAD NÁHRADNÍCH DÍLŮ:



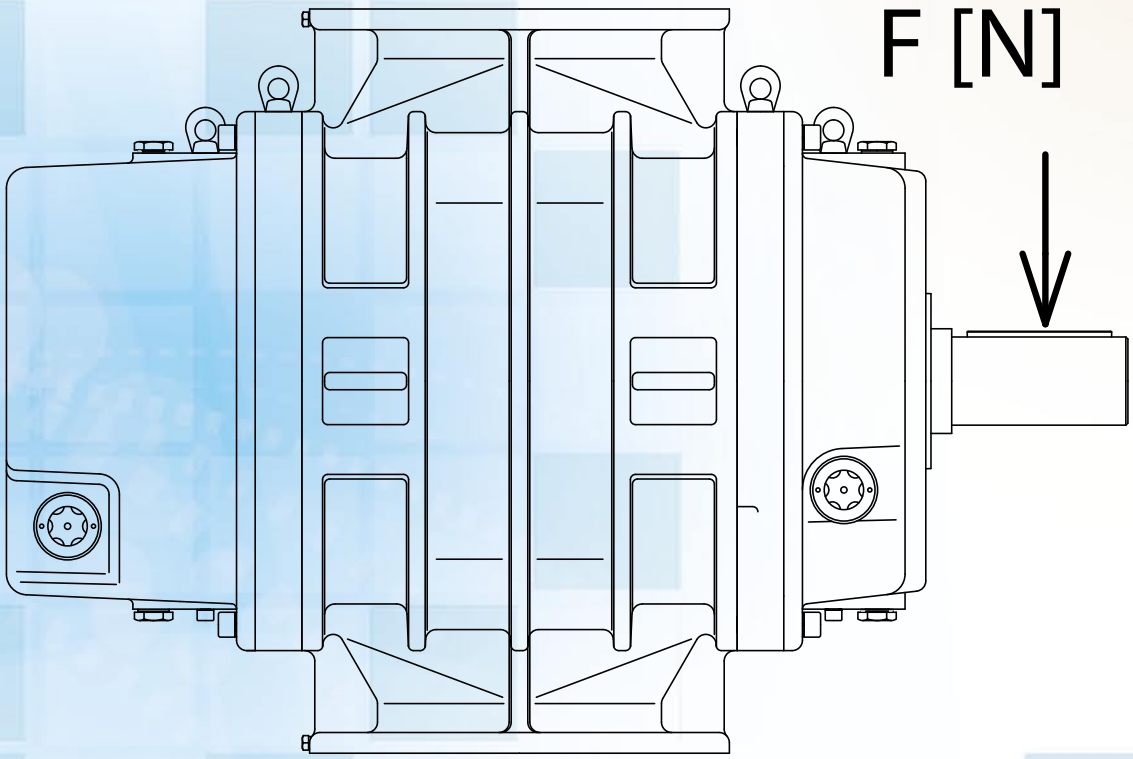
## ROZPAD NÁHRADNÍCH DÍLŮ:



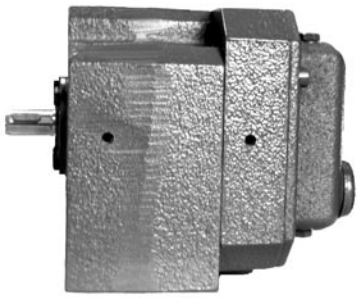
**Legenda:**

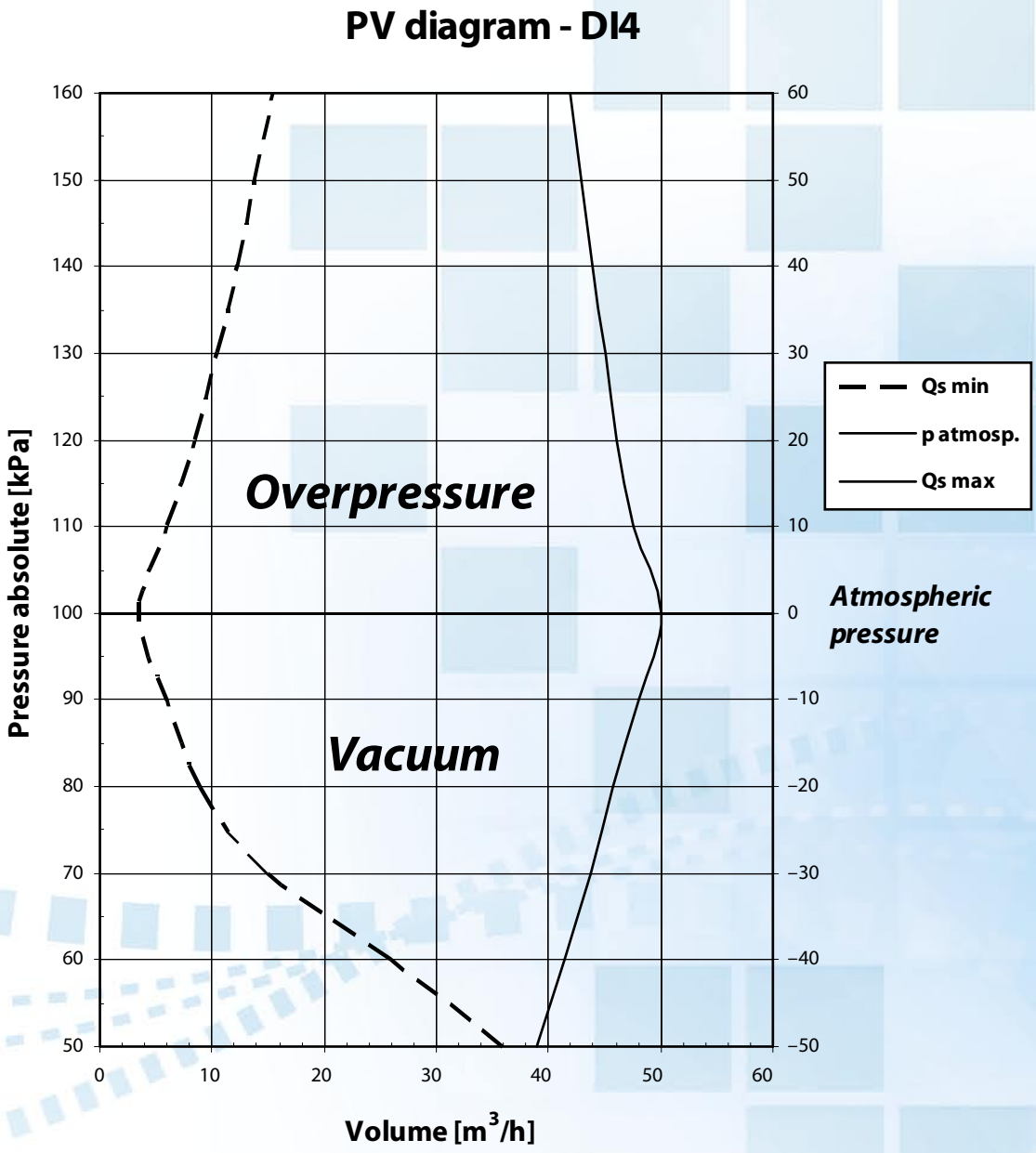
Qs min. [$m^3.h^{-1}$] – minimální výkonnost dmychadla soustrojí
Qs max. [$m^3.h^{-1}$] – maximální výkonnost dmychadla soustrojí
tlak [kPa]
výkonnost [$m^3.h^{-1}$]

| Typ dmychadla | DI4 | DI6 | DI10 | DI20 | DI30 | DI40 | DI50 | DI60 | DI65 | DI66 | DI70 | DI90 | DI100 | DI110 | DI120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximální radiální zatížení F [N] | 100 | 150 | 650 | 600 | 1200 | 1100 | 1900 | 1800 | 1950 | 2300 | 3400 | 6000 | 7800 | 7500 | 7500 |

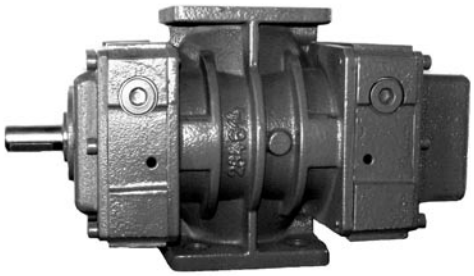


## DMYCHADLO PRO PŘETLAK A PODTLAK DI4
## BLOWER FOR PRESSURE AND VACUUM DI4



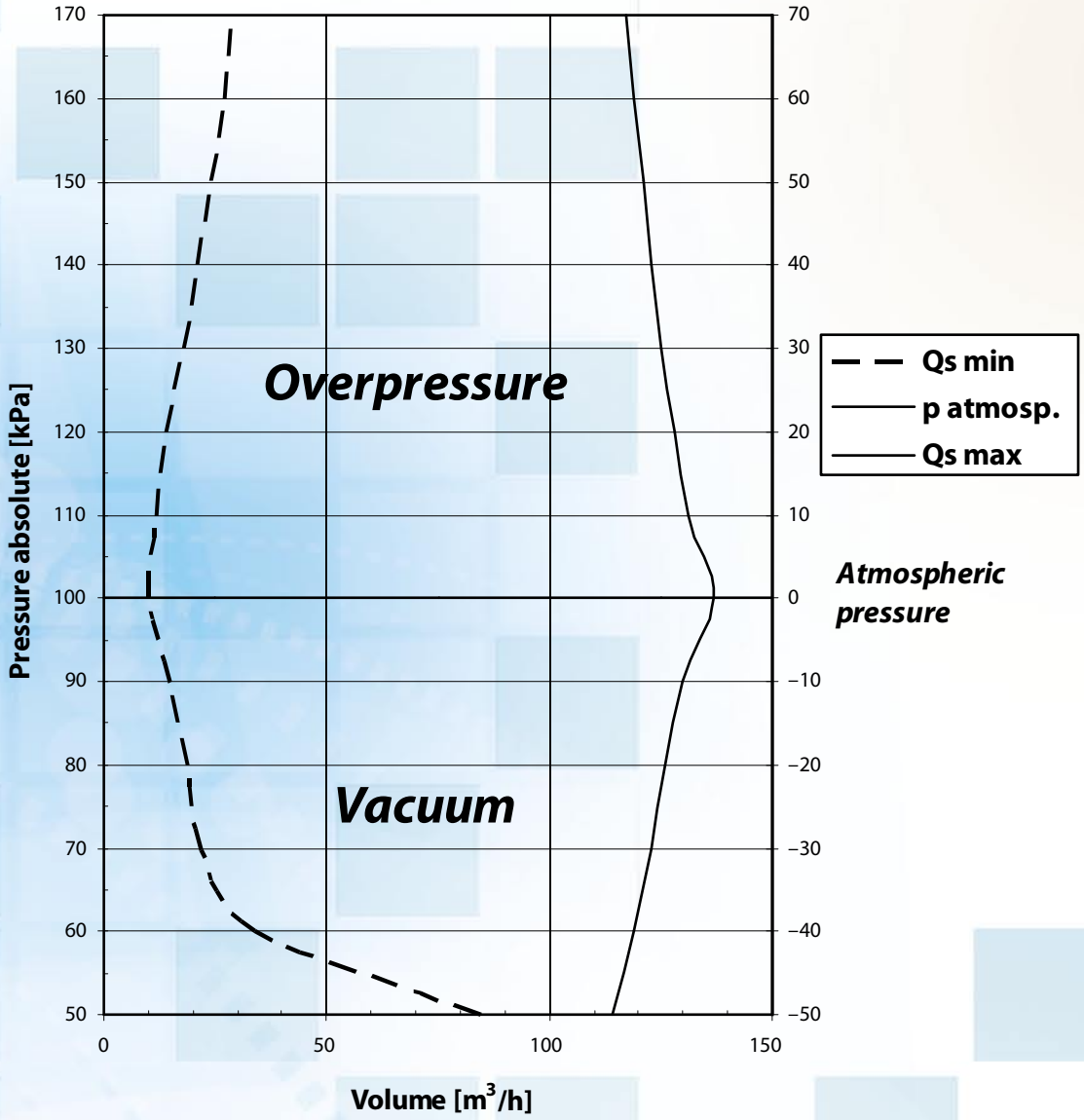



| Tlak abs. | 50 | w60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 36 | 26 | 15 | 9 | 6 | 3,5 | 6 | 8,4 | 10,5 | 12,3 | 13,8 | 15,4 |
| Qs max | 39 | 41,5 | 43,7 | 45,7 | 48 | 50 | 47,5 | 46 | 45 | 44 | 43 | 42 |



## DMYCHADLO PRO PŘETLAK A PODTLAK DI6
## BLOWER FOR PRESSURE AND VACUUM DI6

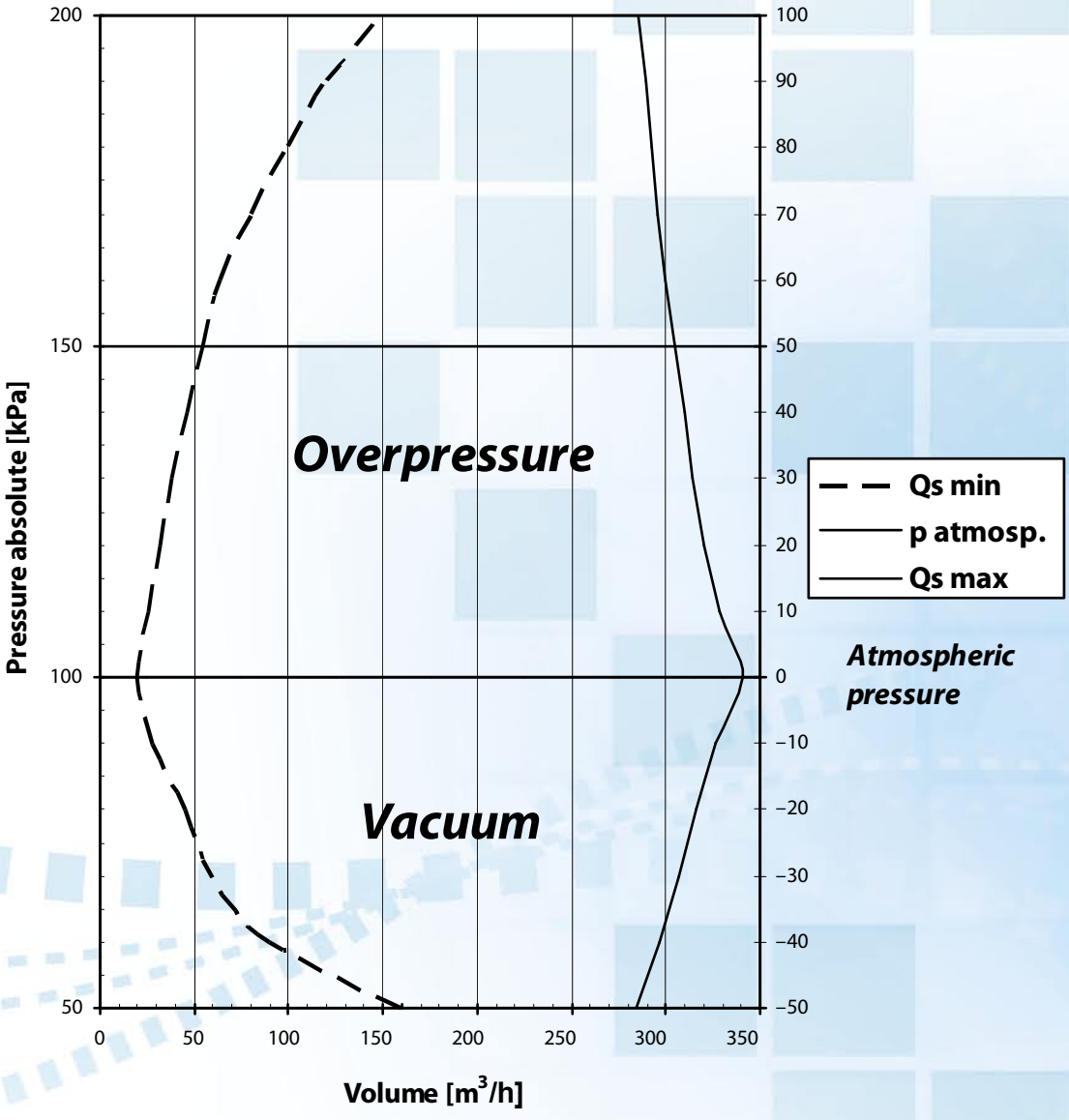
### PV diagram - DI6




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 85 | 34 | 22 | 19 | 15 | 10 | 12 | 14 | 18 | 21 | 24 | 27 | 29 |
| Qs max | 114 | 119 | 123 | 126 | 130 | 137 | 131 | 128 | 125 | 123 | 121 | 119 | 117 |

# DMYCHADLO PRO PŘETLAK A PODTLAK DI10
# BLOWER FOR PRESSURE AND VACUUM DI10

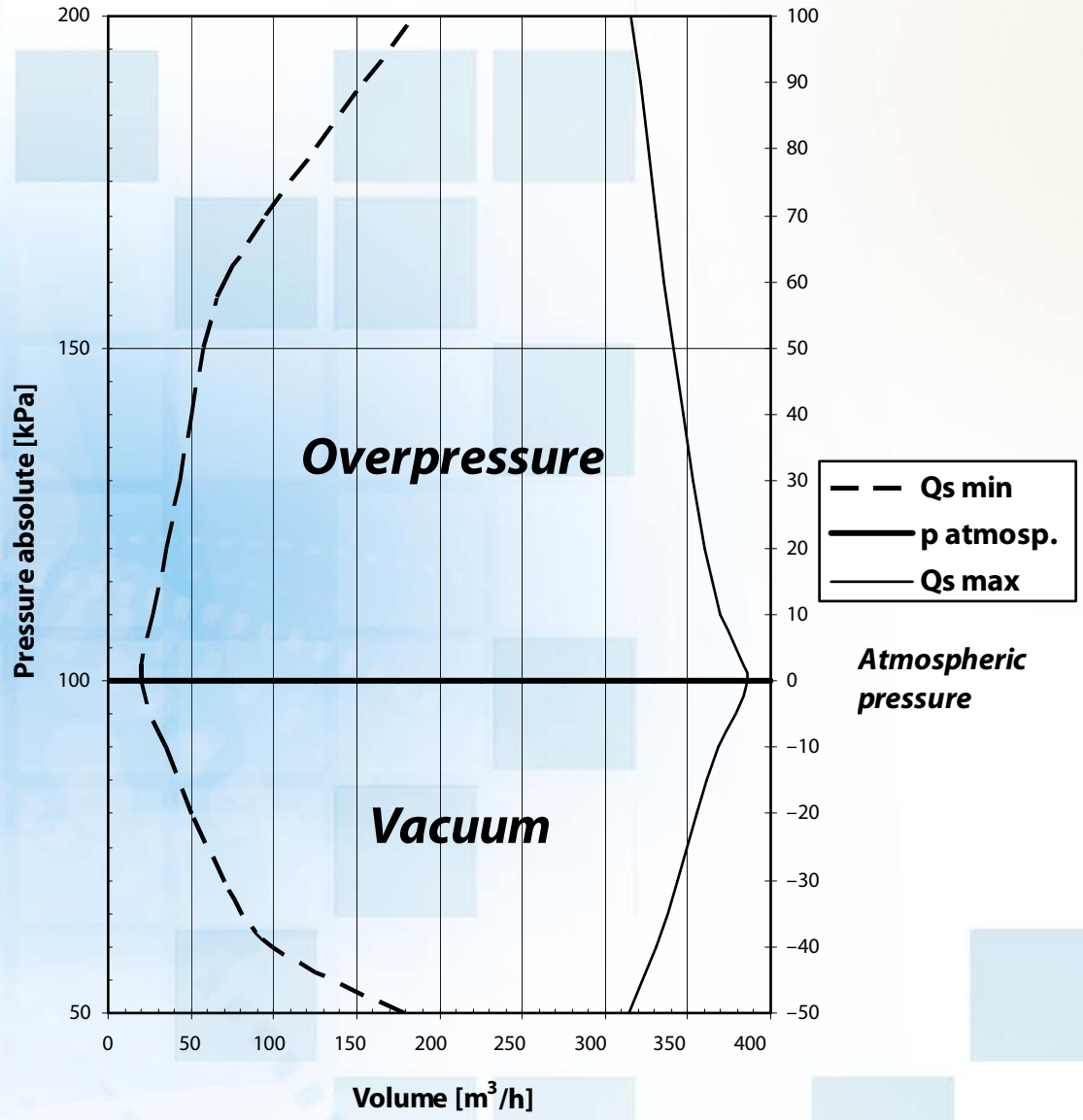
## PV diagram - DI10




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 160 | 90 | 60 | 45 | 28 | 20 | 26 | 32 | 38 | 46 | 54 | 64 | 80 | 100 | 120 | 150 |
| Qs max | 284 | 297 | 307 | 317 | 327 | 341 | 328 | 320 | 315 | 310 | 305 | 300 | 296 | 293 | 289 | 285 |

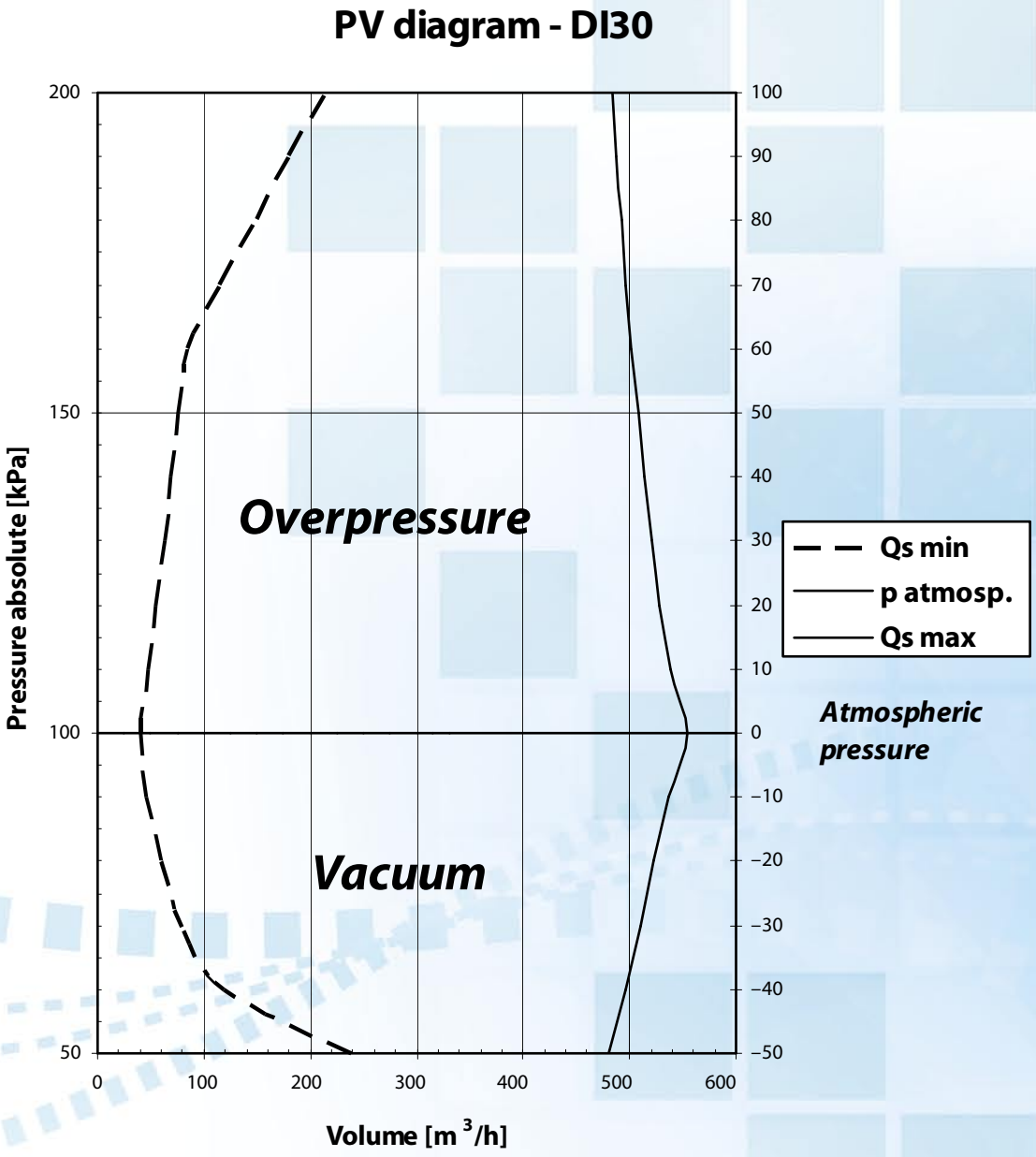
## DMYCHADLO PRO PŘETLAK A PODTLAK DI20
## BLOWER FOR PRESSURE AND VACUUM DI20

### PV diagram - DI20




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 180 | 100 | 70 | 50 | 35 | 20 | 27 | 35 | 43 | 50 | 58 | 70 | 95 | 125 | 155 | 185 |
| Qs max | 314 | 331 | 344 | 356 | 368 | 386 | 370 | 360 | 353 | 347 | 341 | 336 | 331 | 326 | 321 | 316 |

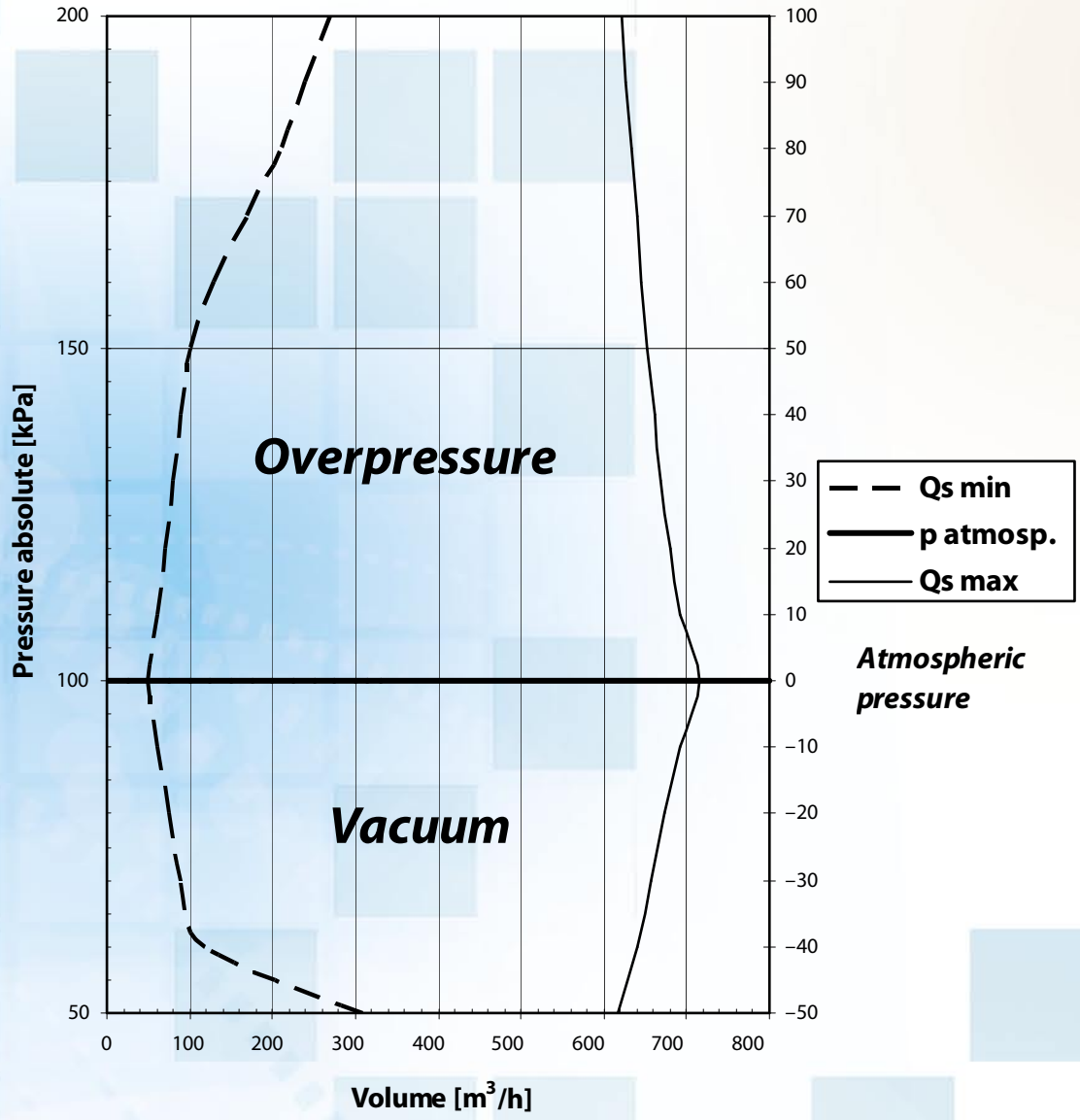
## DMYCHADLO PRO PŘETLAK A PODTLAK DI30
## BLOWER FOR PRESSURE AND VACUUM DI30




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 240 | 120 | 80 | 60 | 45 | 40 | 47,5 | 55 | 62,5 | 69 | 76,5 | 85 | 115 | 150 | 180 | 215 |
| Qs max | 480 | 497 | 511 | 523 | 537 | 555 | 539 | 528 | 520 | 514 | 508 | 502 | 497 | 492 | 487 | 483 |

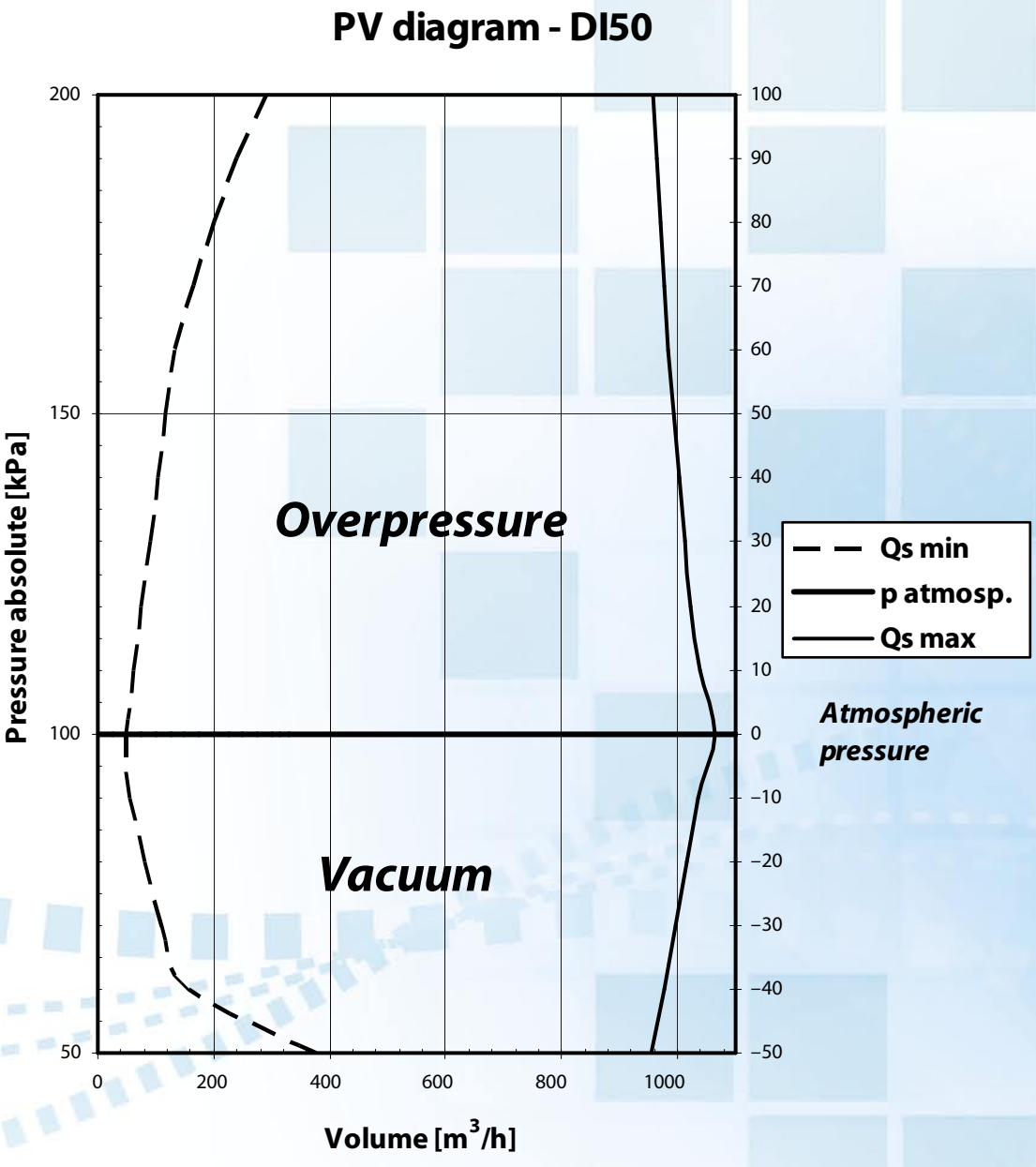
## DMYCHADLO PRO PŘETLAK A PODTLAK DI40
## BLOWER FOR PRESSURE AND VACUUM DI40

### PV diagram - DI40




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 310 | 120 | 90 | 75 | 60 | 50 | 60 | 70 | 80 | 90 | 100 | 130 | 170 | 210 | 240 | 270 |
| Qs max | 618 | 640 | 658 | 674 | 691 | 715 | 693 | 680 | 669 | 661 | 653 | 646 | 640 | 634 | 627 | 621 |

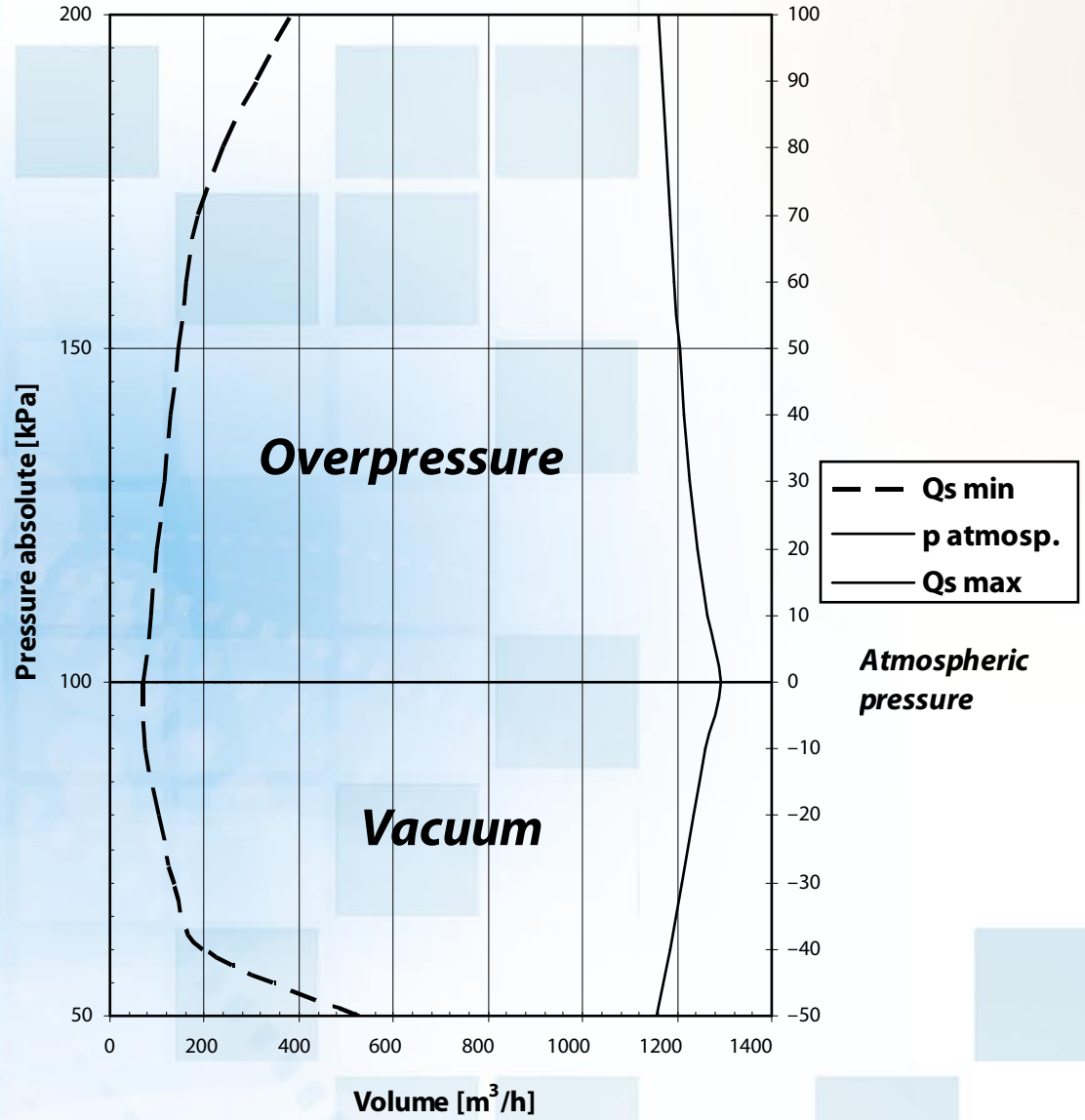
# DMYCHADLO PRO PŘETLAK A PODTLAK DI50
# BLOWER FOR PRESSURE AND VACUUM DI50




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 380 | 160 | 110 | 82 | 56 | 50 | 63 | 76 | 89 | 103 | 117 | 132 | 165 | 200 | 240 | 290 |
| Qs max | 954 | 978 | 998 | 1016 | 1036 | 1064 | 1038 | 1023 | 1012 | 1002 | 993 | 985 | 978 | 971 | 964 | 957 |

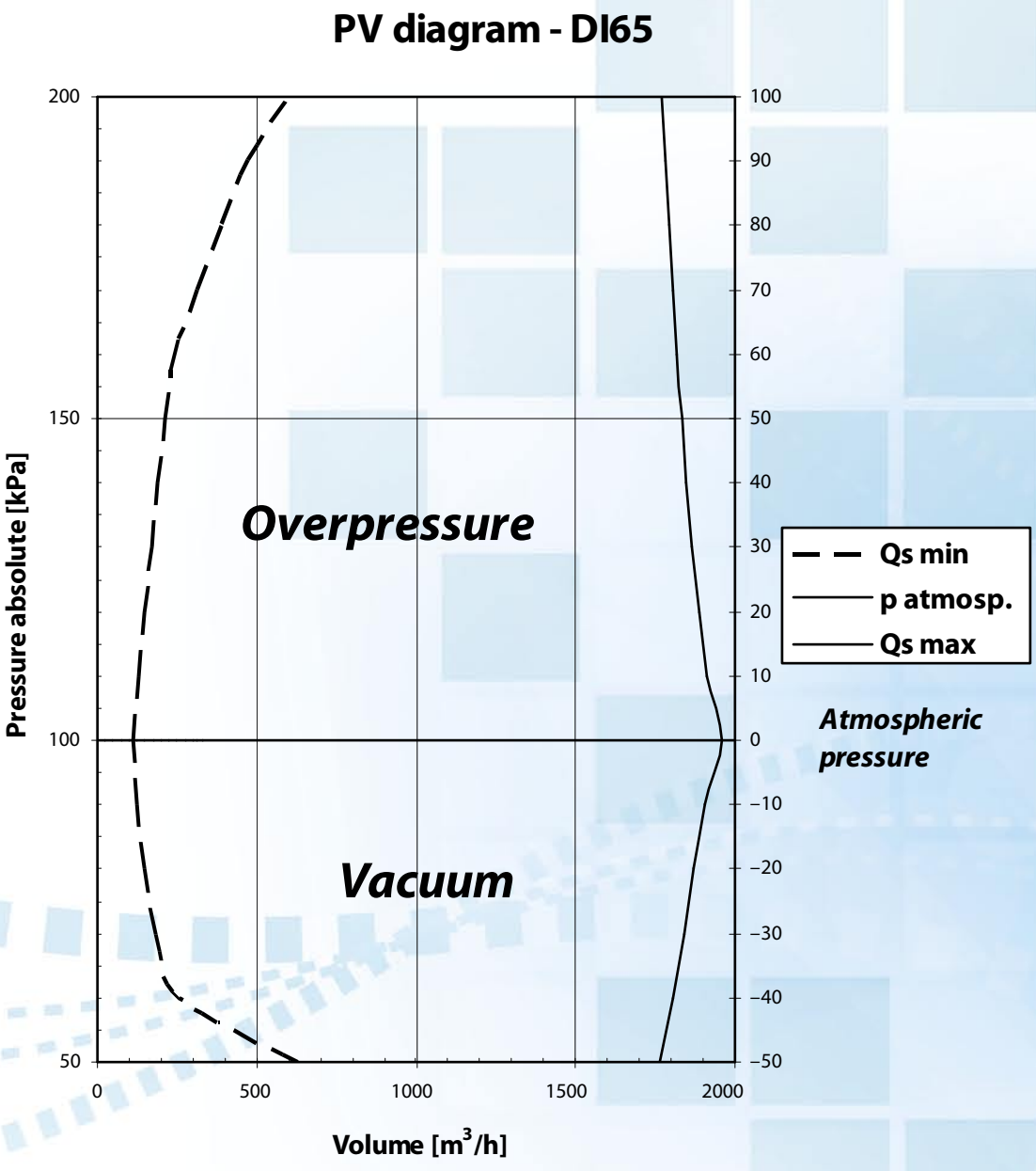
## DMYCHADLO PRO PŘETLAK A PODTLAK DI60
## BLOWER FOR PRESSURE AND VACUUM DI60

### PV diagram - DI60




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 530 | 200 | 136 | 105 | 75 | 70 | 85 | 100 | 115 | 130 | 145 | 160 | 185 | 240 | 310 | 385 |
| Qs max | 1156 | 1186 | 1211 | 1234 | 1259 | 1294 | 1262 | 1243 | 1228 | 1216 | 1205 | 1195 | 1186 | 1177 | 1169 | 1160 |

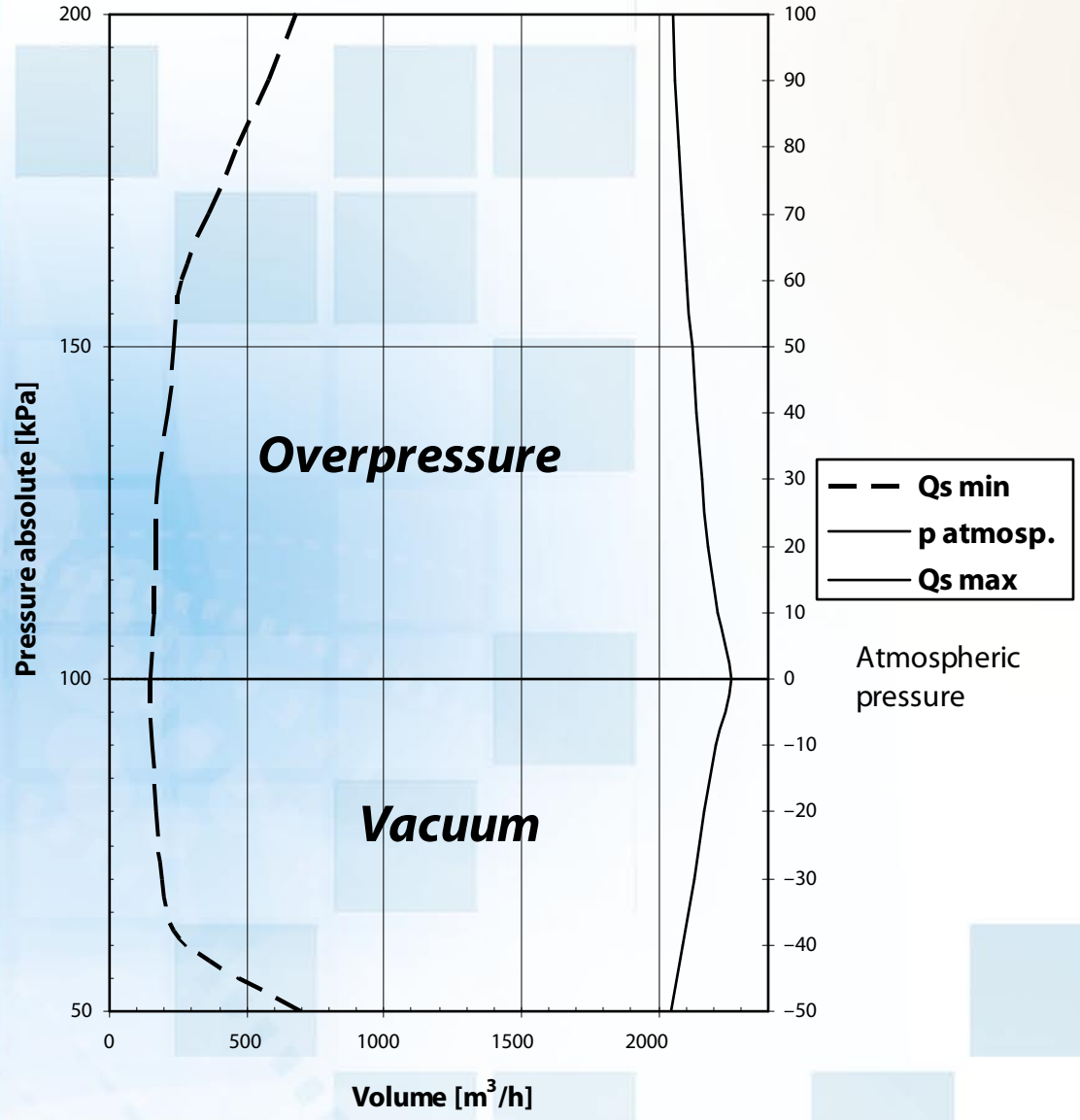
## DMYCHADLO PRO PŘETLAK A PODTLAK DI65
## BLOWER FOR PRESSURE AND VACUUM DI65




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 630 | 260 | 185 | 148 | 125 | 110 | 130 | 150 | 170 | 190 | 210 | 240 | 310 | 390 | 470 | 600 |
| Qs max | 1763 | 1806 | 1841 | 1873 | 1908 | 1958 | 1913 | 1886 | 1865 | 1848 | 1832 | 1818 | 1805 | 1793 | 1781 | 1769 |

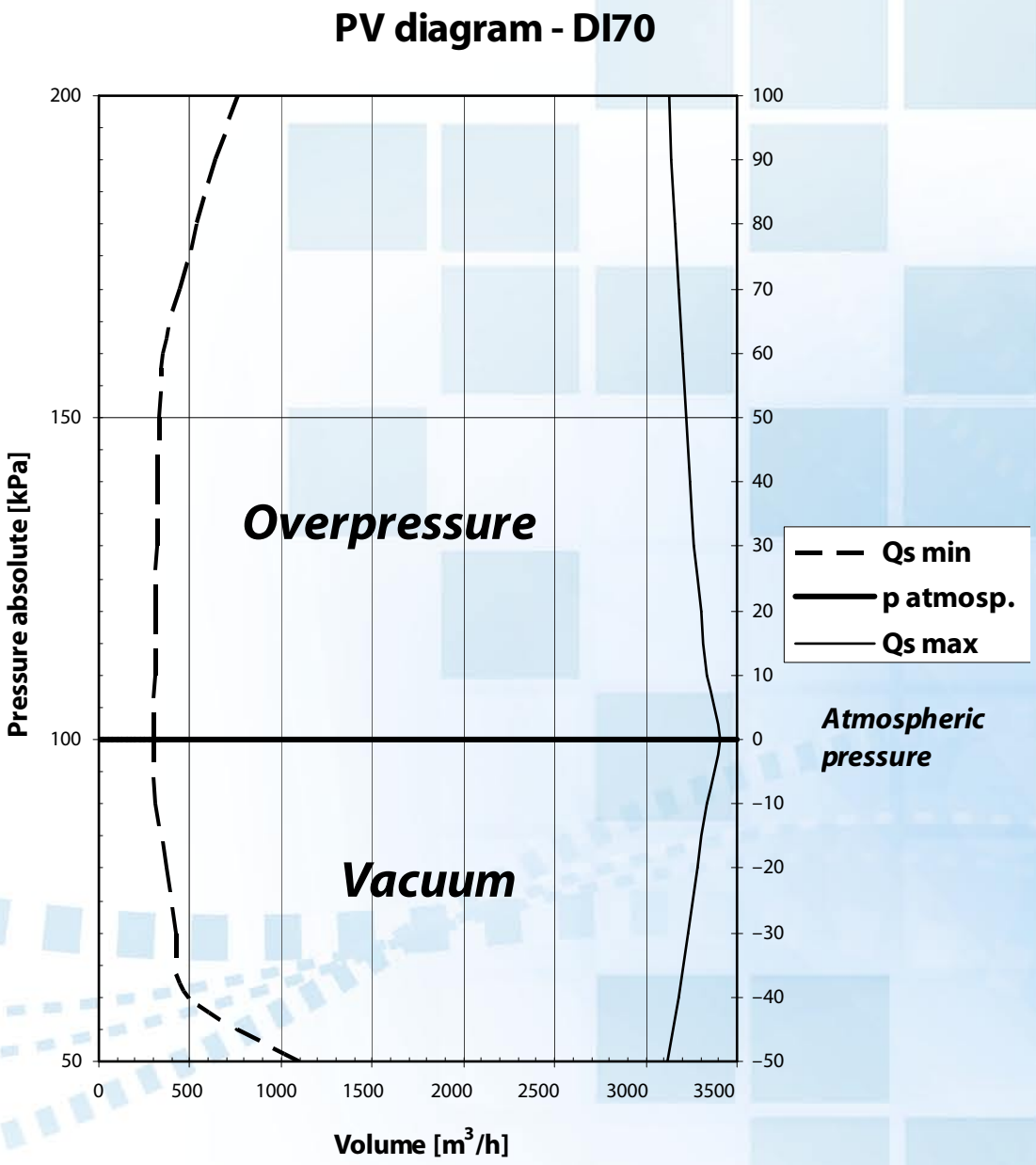
## DMYCHADLO PRO PŘETLAK A PODTLAK DI66
## BLOWER FOR PRESSURE AND VACUUM DI66

### PV diagram - DI66




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 700 | 280 | 190 | 170 | 155 | 150 | 160 | 169 | 180 | 212 | 236 | 260 | 360 | 470 | 580 | 680 |
| Qs max | 2043 | 2091 | 2132 | 2169 | 2210 | 2267 | 2215 | 2184 | 2160 | 2140 | 2122 | 2106 | 2091 | 2077 | 2063 | 2050 |

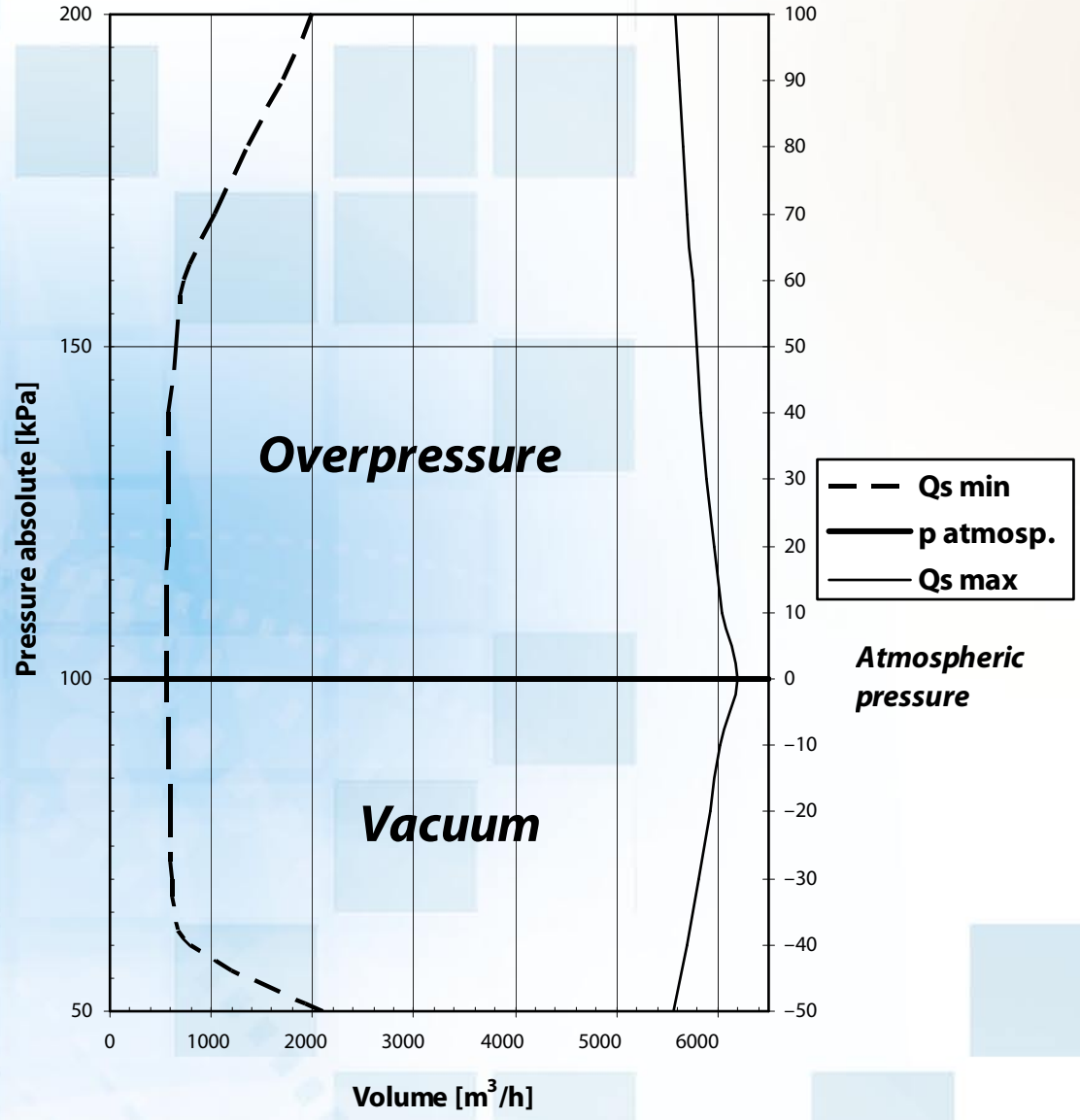
## DMYCHADLO PRO PŘETLAK A PODTLAK DI70
## BLOWER FOR PRESSURE AND VACUUM DI70




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 1100 | 500 | 425 | 375 | 310 | 300 | 306 | 312 | 318 | 324 | 331 | 350 | 440 | 540 | 640 | 760 |
| Qs max | 3117 | 3179 | 3231 | 3279 | 3332 | 3407 | 3339 | 3299 | 3267 | 3241 | 3218 | 3198 | 3178 | 3160 | 3142 | 3125 |

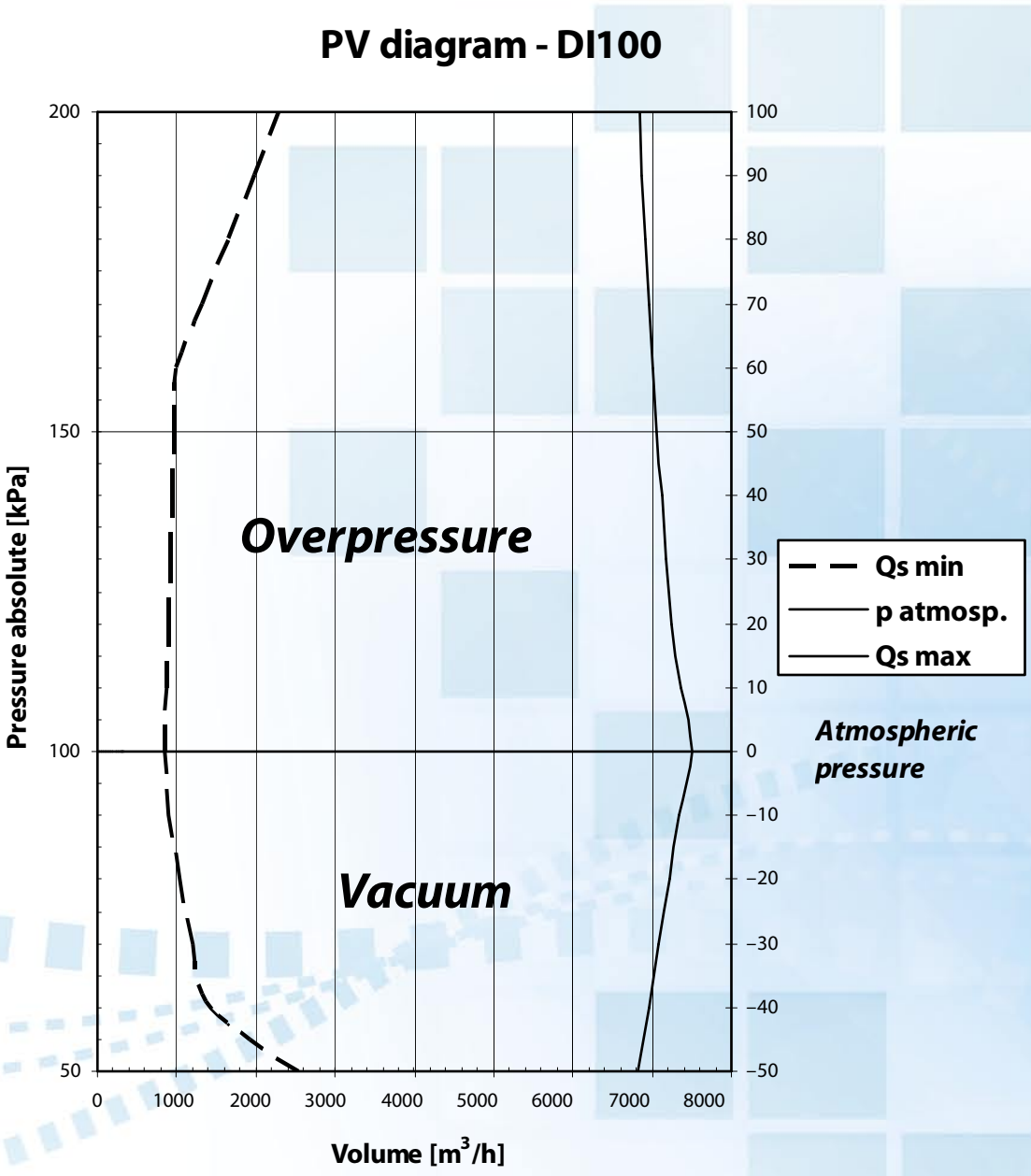
## DMYCHADLO PRO PŘETLAK A PODTLAK DI90
## BLOWER FOR PRESSURE AND VACUUM DI90

### PV diagram - DI90




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 2100 | 800 | 620 | 590 | 570 | 550 | 559 | 569 | 576 | 582 | 650 | 720 | 1040 | 1360 | 1700 | 2000 |
| Qs max | 5569 | 5703 | 5814 | 5918 | 6030 | 6188 | 6044 | 5958 | 5892 | 5837 | 5788 | 5744 | 5702 | 5663 | 5625 | 5588 |

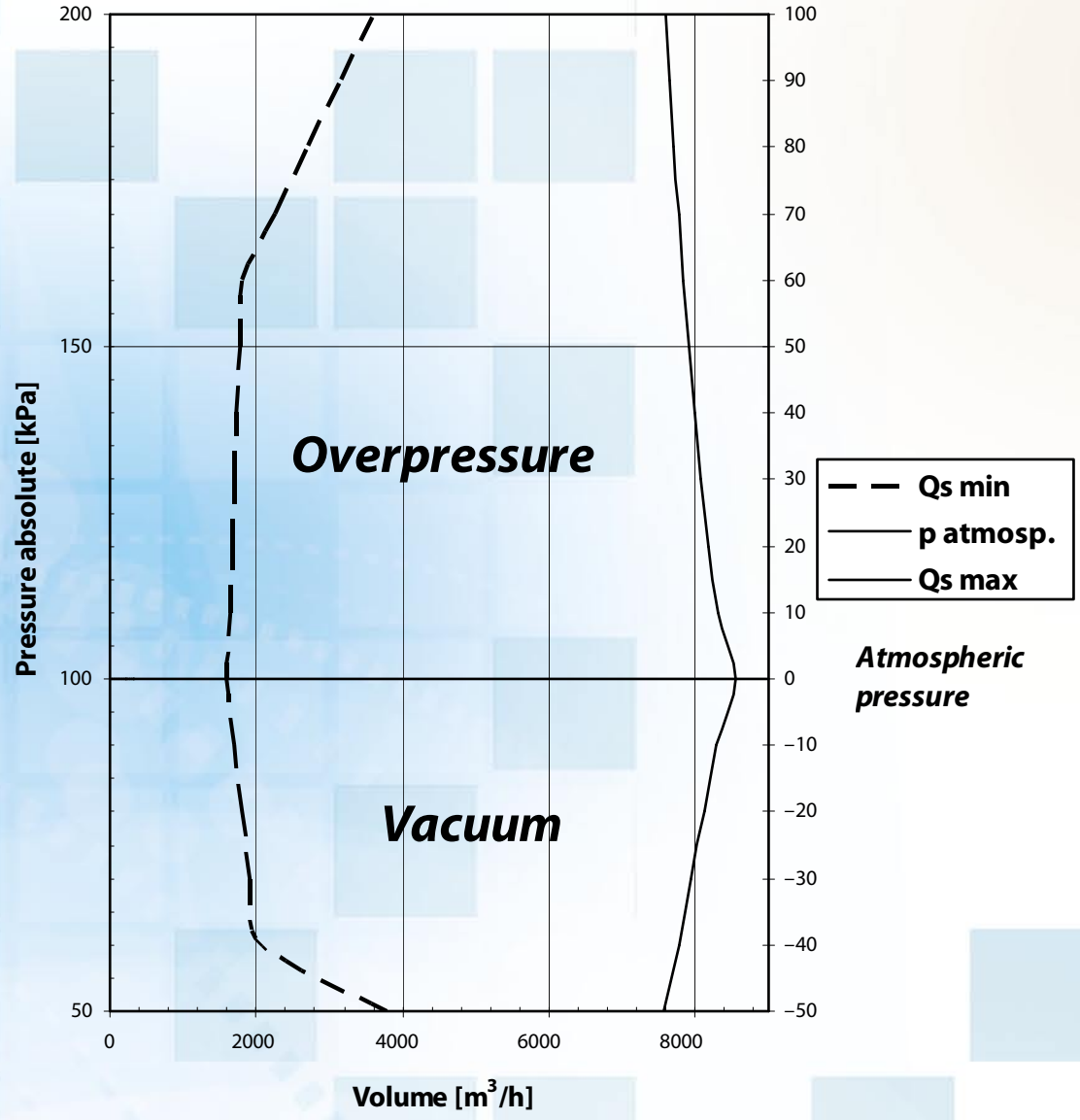
## DMYCHADLO PRO PŘETLAK A PODTLAK DI100
## BLOWER FOR PRESSURE AND VACUUM DI100




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 2560 | 1450 | 1200 | 1050 | 900 | 850 | 875 | 900 | 925 | 950 | 975 | 1000 | 1325 | 1650 | 1975 | 2300 |
| Qs max | 6817 | 6968 | 7090 | 7210 | 7335 | 7515 | 7352 | 7256 | 7180 | 7118 | 7063 | 7013 | 6966 | 6922 | 6879 | 6838 |

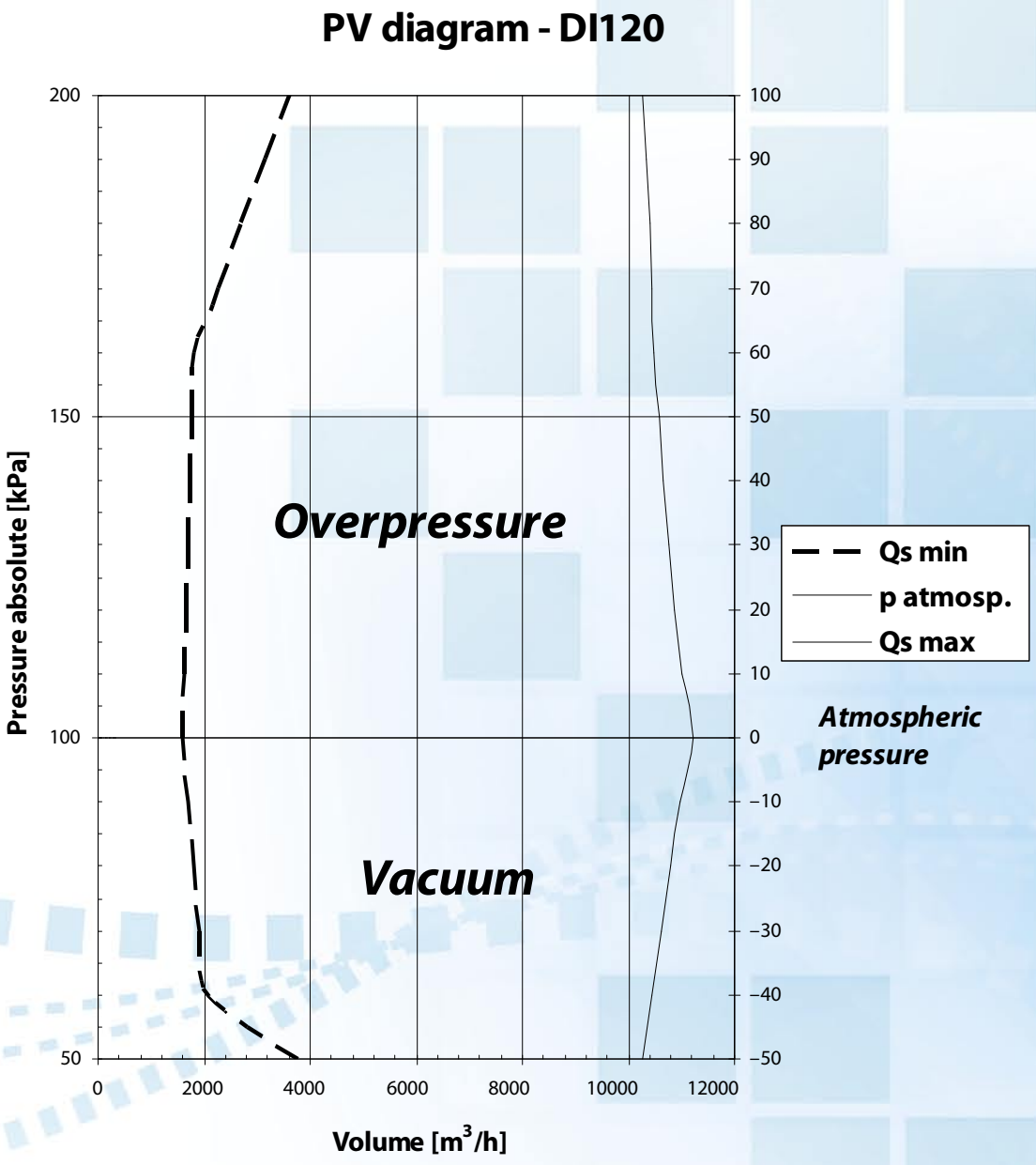
## DMYCHADLO PRO PŘETLAK A PODTLAK DI110
## BLOWER FOR PRESSURE AND VACUUM DI110

### PV diagram - DI110




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 3800 | 2100 | 1900 | 1800 | 1700 | 1600 | 1634 | 1668 | 1702 | 1735 | 1768 | 1805 | 2250 | 2700 | 3150 | 3600 |
| Qs max | 7563 | 7776 | 7951 | 8117 | 8290 | 8547 | 8318 | 8181 | 8076 | 7987 | 7908 | 7836 | 7769 | 7702 | 7641 | 7580 |

## DMYCHADLO PRO PŘETLAK A PODTLAK DI120
## BLOWER FOR PRESSURE AND VACUUM DI120




| Tlak abs. | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Qs min | 3800 | 2100 | 1900 | 1800 | 1700 | 1600 | 1634 | 1668 | 1702 | 1735 | 1768 | 1805 | 2250 | 2700 | 3150 | 3600 |
| Qs max | 10255 | 10460 | 10635 | 10795 | 10970 | 11220 | 11000 | 10860 | 10757 | 10670 | 10590 | 10495 | 10455 | 10395 | 10335 | 10280 |

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